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ABSTRACT

Sixty profiles are presented that demonstrate actual contracting in practice between organizations and colleges for the provision of instruction to employees, clients, or members. The objective is to assist colleges in the early stages of developing such arrangements, as well as to guide organizations that are considering this approach. Contracts are described that have involved two-year, four-year, public, and private colleges, as well as a broad mix of businesses and industries, government agencies, and voluntary associations. Each profile outlines the type of student who has attended, course content, schedule, methods and faculty members used, location, college and organization services, contract charges, evaluation, and certification, and provides a contact at the participant school. The first section of profiles, contracts with business/industry, describe job-specific and company-specific training, as well as academic, scientific, and enrichment programs. The second section of profiles, contracts with government and voluntary associations, describes programs addressing the employment needs of local governments, state governments, the federal government, the United States Armed Forces, religious groups, minority groups, special-interest groups, and unions. (SW)

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Training by Contract

College–Employer Profiles

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College Entrance Examination Board
New York, 1983

NE 016 933

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The Office of Adult Learning Services (OALS) of the College Board conducts activities to improve adults' access to postsecondary education. The major goals of the office are to provide new programs, training, and publications to support the transition of adults to and from education; help institutions strengthen their capabilities in lifelong education; develop the skills of professionals who serve adults; assemble and disseminate information about adult learning; and advance knowledge in the field of adult learning. To meet these goals, the office offers advisory services, technical assistance, and training workshops. It also produces publications and develops new products.

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CONTENTS

Foreward vii

Preface ix

Acknowledgments xi

Overview xiii

I. Contracts with Business and Industry
A. Degree Programs and Credit Courses 3–23
B. Certificate Programs and Noncredit Courses 27–44

II. Contracts with Government Agencies and Voluntary Associations
A. Degree Programs and Credit Courses 47–59
B. Certificate Programs and Noncredit Courses 63–75

III. Index
A. Colleges 79–80
B. Organizations 81–82

FOREWORD

Descriptions of possible arrangements that can be made between the world of education and the world of work have come in many forms, a few being collaboration, linkage, alliance, and partnership. Many specific activities are assumed within any one of these definitions, including exchanges between faculty and workers, sharing of facilities and materials, internships, apprenticeships, work-study arrangements, educational leaves of absence, membership on advisory committees (for college-curriculum development and other purposes), and contracting for instruction. While the domain can be large and complex, this publication has a single purpose: it deals solely with one activity that has increasing importance to institutions of higher education—training by contract.

This term refers to an arrangement in which an organization, whether a business, a government agency, or a voluntary association, contracts directly with a college for provision of instruction to its employees, its clients, or its members. Training by contract does not include any arrangement in which an individual enrolls in a college course at his or her own initiative and pays tuition charges and other expenses, even if these expenses are subsequently reimbursed. The term as it is used here means an arrangement in which the organization itself is *learning*, by arranging for the education or training of the people for whom it is responsible.

Training by contract merits attention for several reasons. First, the demand among organizations for training and education is strong and well supported. The amount of money spent each year on business and industrial training (not including the public sector) is staggering. Some research on this subject was made by Robert Craig of the American Society for Training and Development, and while Craig was unwilling to imply precision with an exact figure, he settled on a range of $30 to $40 billion. Craig states that this figure "approximates half of the estimated $65 billion spent in 1980 for traditional higher education" (Craig and Evers, 1981). He also assumed that only half the nation's employees were receiving training—roughly 50 million. Some of these funds are allocated to tuition aid for those who select their own course of study, but the bulk of the money is spent on company-required training, which includes the support of contractual arrangements between businesses and colleges and other groups that can supply instruction. Thus, contractual arrangements with business demonstrate an enormously new and relatively untapped source of clientele for American colleges.

Second, the demand for training is predicted to increase. Economists tell us that the United States is undergoing a reindustrialization—the older, large-scale automobile, steel, and textile industries will decrease in size, while the new communications industries will continue to grow. Demographers predict that as we move into the nineties, the United States will face a shortage of entry-level workers in new areas of technology, and there will be an oversupply of middle-level workers whose skills will be outmoded. With this increasing demand for retraining, contractual arrangements with employers will provide an even more fruitful area of development for colleges.

Third, recently completed market-research stud-

ies for more than 20 colleges, conducted through the Office of Adult Learning Services' Community Assessment Program (CAP), showed that employers were very much interested in obtaining services from their nearby colleges. In fact, in nearly all the communities surveyed, the demand for training among employers exceeded the supply that colleges were able to provide.

Fourth, the profiles in the book clearly demonstrate that some colleges are ready, willing, and able to provide the educational services that organizations need. The fact that few colleges in the past have done this led a number of companies to do one of two things: many have created their own "corporate colleges," fully accredited and degree-awarding, which recruit, enroll, and graduate students much like any other college. General Motors was one of the pioneers but has since been followed by Arthur D. Little, Wang Industries, and McDonnell Douglas, to name but a few. Or, they have established large, internal training programs and developed units to handle their needs for continuing education. Such companies include Merrill Lynch, Xerox, NCR, and IBM. The colleges appearing in this book, however, have taken effective steps to offset this trend: they sought company business, they studied company needs, they adjusted curriculum content and modified time schedules, and they provided excellent standards of teaching.

Motivated by CAP's experiences in cementing contractual arrangements between organizations and colleges, the Office of Adult Learning Services conducted a nationwide survey of training by contract to better understand the phenomenon. OALS had two purposes: (1) It wished to assist colleges that are considering or have begun to develop such training arrangements with local organizations. The programs identified and reported on are intended to help colleges grasp the state of the art, make use of a network of contracts, and adapt or adopt programs already developed to meet the needs of their own communities. And (2) The office wished to assist organizations that are considering contracting with colleges to see how this new form of "working together" can be most beneficial to them. The profiles demonstrate how colleges offer a variety of programs, with or without academic credit, that allow employers the flexibility of choosing among the best alternatives rather than setting up their own training services. Organizations are eager to contract for training and to avoid unnecessary duplication.

Finally, it is hoped that this collection of profiles will educate policymakers and the general public about this new and important relationship, and demonstrate the variety of ways in which colleges and employers together can educate American workers and supply them with the competencies to maintain their effectiveness through ongoing training and education programs.

It may be of interest to the reader to note that a second, related publication from OALS will be published shortly to illuminate further the subject of training by contract. Three of the contracts described in this book have been examined very carefully, and a case study has been made of each of them. The case studies reveal the intricacies, problems, opportunities, benefits, and issues that underpin each situation.

Carol B. Aslanian
Director
Office of Adult Learning Services
The College Board

PREFACE

The information presented in this book needs very little introduction, just as in the same way a cookbook needs no introduction, or a dictionary, or a catalog. The virtue of cookbooks and dictionaries and catalogs lies in their specificity, not in their generality. Most recipes should not be combined, dictionary definitions should not be scrambled, and catalog descriptions should not be mixed.

The value of this book lies in the specificity of the profiles rather than in the larger patterns they form. While this is not to say that the profiles cannot be combined or scrambled or mixed, it is to say that the ingredients must be carefully selected and carefully blended, just as they were in the contracts made and kept between pairs of extremely different institutions. Organizations of all kinds and educational institutions of all kinds contracted with each other and formed a relationship to their mutual benefit. In one sense, the bargains struck between both participants called on each other to engage in thoroughly new behavior. It is, after all, customary for organizations to acquire goods and services from the outside, and it is the practice of colleges to accommodate themselves to the students who enroll.

Whether they demonstrate thoroughly new or thoroughly familiar behavior, the profiles described here demonstrate that two quite different kinds of institutions have learned to work together, in pairs. And if there is an overriding pattern in the profiles, *that* is it.

But there are other patterns to be discerned from these profiles, and one might be that colleges are helping companies to move out of the twentieth century into the twenty-first century. Such a statement merits more definition. It is that all kinds of institutions of higher education—two- and four-year, public and private, large and small—are helping to lead all kinds of businesses, industries, government agencies, and voluntary associations into the future, a future that will also encompass declining productivity, persistent inflation, rising international competition, aging industrial plants, and ever-increasing technology. Organizations have to be ready in order to survive. Those that will survive will be those that invest in creative thinking, in new methods, in training, and in engaging their employees in new experiences. Survival will mean flexibility, change, and learning.

Some other patterns have evolved. Every kind of college has the capacity to teach and has been involved, from Harvard University, to Piedmont Technical College in South Carolina, to St. Mary's University in Texas, to Seattle Central Community College, to the University of Georgia. *That these institutions are so dissimilar forms a pattern.*

Every kind of organization has the capacity to learn and has been involved, from Monsanto Textiles Company, to the Catholic Diocese of Corpus Christi, to the Wood County Welfare Department in Ohio, to the New England Deaconess Hospital, to the Insurance Company of North America (now known as CIGNA).
A pattern here has been that organizations that contract with colleges are large enough to supply a class of students and pay for their tuition.

Everyone has the capacity to learn, and the people who have been trained range from tech-

nicians, to teachers, to dispatchers, to salespersons, to engineers, to managers, to United States Representatives, to shop stewards.

A pattern might be found here in that employees whose jobs are changing because of new equipment and technology are far more likely to want to learn, because their job performance means survival and success for themselves and the organizations they work for.

Every kind of subject matter has been taught, from peptic-ulcer therapy, to financial management for supervisors, to computer training for managers, to associate degrees for technicians, to conversational French, to effective letter writing, to economics.

Here the pattern has been that contracts for single courses have been far more common than contracts for degrees, and courses that offer occupational enhancement have been far more sought-after than those that do not.

The duration of the courses has varied widely, from one day, to one week, to six months, to three years.

A pattern that can be determined here is that the length of the courses has usually been determined by what needed to be learned, rather than what could be taught in a standard semester course.

Every possible method of instruction has been used, from lectures, to discussion groups, to video presentations, to role playing, to case studies, to computer-assisted instruction.

A pattern arises here in that the methods used over and over again have been those that confronted the learners with lifelike problems and assistance in finding out how to solve them.

All kinds of teachers have been used, from college faculty, to adjunct faculty (or a mixture of both), to instructors from the organizations themselves, to outside consultants.

But the basic pattern has been that a heavy majority of those who have taught the courses have been members of the college faculty.

Every kind of location has been used, from the college-campus classroom to the organization's own office, laboratory, computer or training center, or factory.

Here the pattern has been that sessions have been held either on the college campus or at the organization's site rather than at two locations, and of the two locations, more often than not the organization's site has been chosen.

The services offered by colleges varied enormously and have ranged from academic counseling, to supplies, to classrooms, to access to libraries, to tutoring, to course design, to career-development seminars.

The pattern of the services provided has been no different from those offered to the traditional student: any college that offers good services to its student body will offer good services to organizations that wish to make use of them.

Organizations have offered every imaginable service, from classroom space, to time off from work for attendance at classes, to travel expenses for faculty, to instructors, to tuition payments, to computers and other technical equipment, to job-placement services.

The common pattern of the organizations has been to recruit and select the employees who will undergo the training, to give them full pay throughout the training period, and to provide facilities and administrative assistance.

Contractual charges have covered a broad spectrum, from as little as $180 to as much as $300,000, depending on how many students were taught what, by whom, and for how long. Organizations, for the most part, have used their own funds to pay for the training, but in some instances other funding agencies have been utilized to meet, or help to meet, the costs.

The pattern of contractual charges has been based, for the most part, on standard tuition charges, raised somewhat to reflect the extra costs to the college in treating the organization as a student.

Every conceivable kind of certification has been used, from academic credits, to academic degrees, to occupational certification, to Continuing Education Units, to documentation of satisfactory performance.

But the most common pattern of certification has been standard, academic-credit hours reflecting the amount of instructional hours involved.

Every method of evaluation has been used, from questionnaires about course content, instructors, and the facilities to observation of on-the-job skills following training; records of job placement; and follow-up studies of students to determine promotions and salary increases. Evaluations have been carried out by the colleges, the organizations, the students themselves, and by third-party evaluators.

The most common pattern has been the use of ques-

tionnaires completed by the students during and after the training and follow-up studies by the organizations on subsequent job performance.

Even a random reading of any 10 of the profiles in this book can prompt a college to see organizations as new kinds of students, and it is hoped they will deepen a college's repertoire of specific contract possibilities. It is also hoped that it may stimulate a search for the establishment of a most important service to organizations for training, education, growth, and change.

Henry M. Brickell
President
Policy Studies in Education

ACKNOWLEDGMENTS

We would like to express our appreciation to all those who worked on this project. Policy Studies in Education, under the direction of Henry Brickell, was instrumental in designing the survey, collecting the data, and establishing the profile format. We greatly appreciate his contribution and that of his staff. Dale Chapman ably carried out the task of interviewing selected colleges and preparing a significant number of profiles. Special credit goes to Harriet Hoffman, who identified several new programs for the profiles and assisted in the preparation of the final draft of this book. Finally, thanks go to Patti Schaefer and Brian O'Reilly, College Board staff, who worked diligently collecting and verifying information and maintaining careful records as necessary throughout the duration of the project.

OVERVIEW

During the first phase of the study, which took place in the spring of 1982, more than 100 colleges were identified as likely participants in training by contract. These colleges were nominated by OAL staff, consultants, practitioners, national associations, and the business community, and through a review of existing literature in the field. Telephone interviews were conducted with key officials in the colleges to determine the type and extent of the training they had provided. The detailed interviews collected information on the key features of the contracts, such as the types of students who had participated; their qualifications and background; the subject areas covered and the methods of teaching used; the makeup of the faculty; the location; the schedule; the services provided by the college and by the organization; the cost of the contract, where available; how the program was evaluated, and by whom; and the kind of certification granted. When all the information had been gathered, a final copy of the profile was sent to each contributing college for approval.

The 60 training-by-contract programs that are described in this book were selected because they represent a broad cross section of colleges—two-year and four-year, large and small, public and private, situated in varying geographical areas throughout the country. They also represent a large mix of organizations—businesses, industries, government agencies, and voluntary associations. The intent of the selection is to demonstrate the diversification of contract training that has taken place.

The profiles have been divided into two major sections: I. Contracts with Business and Industry, and II. Contracts with Government Agencies and Voluntary Associations. Within those sections, the profiles have been further grouped according to whether they were degree programs and credit courses, or certificate programs and noncredit courses. The Contracts with Business and Industry, as will be seen, describe job-specific and company-specific training, as well as academic, scientific, and enrichment programs that address the particular needs of the company and the work force, from blue-collar workers to management executives. The Contracts with Government Agencies and Voluntary Associations are arranged in the same manner and describe programs that address the particular employment needs of local governments, state governments, the federal government, the United States Armed Forces, religious groups, special-interest groups, minority groups, and unions. The subject areas are of enormous variety and again include job-specific and company-specific training, as well as academic, scientific, and enrichment programs for the total work force, from blue-collar workers to management executives.

The profiles that follow speak for themselves.

I. CONTRACTS WITH BUSINESS AND INDUSTRY

A. Degree Programs and Credit Courses

ASSOCIATE DEGREE PROGRAM FOR MOTOROLA TECHNICIANS

Rio Salado Community College, Phoenix, Arizona
Motorola Incorporated, Phoenix, Arizona

Students — 95 entry-level production-line workers were selected by Motorola Incorporated to participate in this program. Nearly all students were women, including minorities, with no college experience.

Content — A variety of courses were offered, including mathematics, physics, chemistry, and basic and advanced electronics courses. Approximately 21 courses were taught.

Schedule — Courses were held five days a week, eight hours a day, for one year.

Methods — A variety of experiential learning techniques were used, including group discussions, laboratories, and competency-based learning.

Faculty — Rio Salado Community College has no full-time faculty. Most instructors were adjunct faculty. Several electronic laboratory courses were taught by Motorola employees.

Location — Rio Salado Community College has no campus. All courses were taught at the Motorola training center in Phoenix, with the exception of chemistry, physics, and laboratory classes, which were taught at Scottsdale Community College and Maricopa Technical College.

College services — Rio Salado Community College provided registration at the work site, counseling, tutoring, test-anxiety assistance, course outlines, and team-building workshops. Rio Salado coordinated class scheduling, recruited most of the instructors, and were also responsible for reimbursing them. Two complete graduation ceremonies were held.

Organization services — Motorola provided classrooms, space for tutoring, advising, and social activities. They also provided books, technical equipment, and instructors for the electronics laboratories. Students were paid regular salaries during their training; the company provided a graduation dinner and assisted with placement of students.

Contract charges — Motorola Incorporated paid approximately $1,000 per student to cover tuition and books.

Evaluation — Retention rate and student grades were used as gauges of success. Only four students were dropped from the program: 56 percent graduated with honors.

Certification — Students who completed the program received an associate degree in applied science in either electronics or semiconductor technology.

Contact — Dean
Rio Salado Community College
2300 North Central Street
Phoenix, Arizona 85003

AUTOMOTIVE SERVICE ASSOCIATE DEGREE PROGRAM FOR HIGH SCHOOL GRADUATES

Triton College, River Grove, Illinois
General Motors Dealerships, Greater Chicago area, Illinois
General Motors Corporation, Warren, Michigan

Students	Approximately 38 high school graduates from the Greater Chicago area participated in the program. Their ages ranged from 18 to 21. Women were eligible for the program.
Content	A two-year associate degree program in automotive technology was designed to upgrade the technical competence of entry-level technicians. The program required an academic component and an internship at a General Motors dealership.
Schedule	Semesters comprised 11 weeks of intensive course work, followed by an eight-week work program.
Methods	Methods included lectures, demonstrations, and laboratory work on all General Motors products.
Faculty	Triton College faculty members taught all courses.
Location	Courses met on the Triton College campus. Students worked off campus at the sponsoring dealerships.
College services	Triton College developed the curriculum, provided all administrative services, classrooms, libraries, and sold books.
Organization services	General Motors Corporation supplied manuals, components, and vehicles. General Motors dealers paid and supervised the students during work periods.
Contract charges	Tuition and books for students in the district was approximately $1,455 per student, per year, plus necessary tool purchases. Students paid their own tuition.
Evaluation	The program was evaluated regularly by students, General Motors dealers, and Triton College administration.
Certification	Students who completed the program were awarded an associate degree in automotive technology.
Contact	Assistant Dean of Technology Triton College 2000 Fifth Avenue River Grove, Illinois 60171

BUSINESS MANAGEMENT FOR PRODUCTION-LINE WORKERS

Johnson State College, Burlington, Vermont
Digital Equipment Corporation, Burlington, Vermont

Students	Approximately 70 production-line workers from the Digital Equipment Corporation participated in this program. All were high school graduates and some had completed several college courses.
Content	Topics included general education, business, and mathematics.
Schedule	Two courses were offered during 16-week semesters, as well as an eight-week summer semester. Classes met Mondays and Thursdays from 3:30 p.m. to 6 p.m. Students attended classes on their own time.
Methods	Lectures and the case method were supplemented by individualized instruction on microcomputers.
Faculty	Courses were taught by Johnson State College faculty.
Location	All courses were taught at the Digital Equipment plant in Burlington.
College services	Johnson State College developed a mathematics tutorial and offered tutoring services.
Organization services	The Digital Equipment Corporation provided classroom space.
Contract charges	Johnson State College developed a sliding scale that enabled Digital Equipment to pay a minimum of $2,050 per course (for seven students), and a maximum of $2,450 per course (for 30 students). The total contract for 73 students enrolled in four courses was $11,800.
Evaluation	Students completed evaluation questionnaires both during and at the end of course. Johnson State College faculty members and Digital Equipment training managers met jointly to determine program modifications.
Certification	Students could enroll in the program for academic credit toward an associate degree in business management, or they could receive CEUs.
Contact	Vice President, Academic Affairs Johnson State College Johnson, Vermont 05656

COMPUTER STUDIES FOR EMPLOYEES AT DATA GENERAL CORPORATION

University System of New Hampshire, School for Lifelong Learning, Durham, New Hampshire
Data General Corporation, Portsmouth, New Hampshire

Students	Approximately 100 production employees underwent this training. Their primary work responsibility was assembling computer circuit boards. All had high school diplomas (or GEDs), and some had taken some college courses.
Content	The computer courses offered an introduction to statistics and computer literacy, as well as Basic, Cobal, Pascal, and Fortran computer languages. In addition to these technical courses, students took classes in general studies, such as mathematics, English, and history.
Schedule	Three 15-week sessions were offered each year. Classes met one day each week from 3:45 p.m. to 6:45 p.m. The typical student enrolled in six classes each year.
Methods	Computer courses were taught through five-member groups, and all groups worked on computer programming and software exercises. Lectures and group discussions were the primary methods used for the general courses.
Faculty	Approximately half of the faculty were from the University of New Hampshire, from a variety of departments, including computer science, mathematics, and English. The others were adjunct faculty members from the School for Lifelong Learning.
Location	All classes were held in Data General Corporation's classrooms.
College services	The School for Lifelong Learning printed all course materials, assessed students' prior learning, and provided on-site academic counseling, study-skills sessions, and career-development workshops.
Organization services	Data General provided classroom facilities and computer equipment for courses, released students for academic counseling, and promoted the courses within the company.
Contract charges	Data General Corporation paid the University System of New Hampshire, School for Lifelong Learning, a total of approximately $165,000—$185 per student, per four-credit course (the University System's standard off-campus per credit-hour fee of $45 per credit, plus service fee).
Evaluation	A variety of evaluation techniques, including student ratings, student grades, and job-performance ratings were used to evaluate the objectives-based program.
Certification	All courses were taught for academic credit. Students who completed a scheduled program earned an associate degree in general studies from the University System of New Hampshire, School for Lifelong Learning.
Contact	Director of Management Development Services School for Lifelong Learning University System of New Hampshire P.O. Box 4089 Portsmouth, New Hampshire 03801

CONVERSATIONAL FRENCH FOR PROGRAMMERS

Worcester State College, Worcester, Massachusetts
Norton Company, Worcester, Massachusetts

Students	Fifteen employees, including entry-level programmers and data-processing managers participated in this training. Their educational backgrounds ranged from high school diplomas to master's degrees.
Content	An introductory French course.
Schedule	There were 10 weeks of classes, two days a week, held on Tuesday mornings from 9 a.m. to 1:30 p.m., and Friday afternoons from 1:30 p.m. to 3 p.m.
Methods	Course methods included lectures, role playing, audiovisual presentations, and examinations.
Faculty	Instructors were faculty members from the Worcester State College Language and Literature Department.
Location	Classes were held at the Norton Company.
College services	Worcester State College provided on-site registration, counseling, and evaluation. All facilities on campus were available to students.
Organization services	The Norton Company selected students, provided classroom space, and time off from work.
Contract charges	The contract was approximately $2,600.
Evaluation	Worcester State College faculty members evaluated the teaching and the course materials.
Certification	Students were awarded three hours of academic credit applicable toward a bachelor's degree.
Contact	Assistant Director Division of Graduate and Continuing Education Worcester State College Worcester, Massachusetts 01612

COOPERATIVE EXTERNAL DEGREE PROGRAM

Empire State College, Saratoga Springs, New York
IBM Corporation, Brooklyn, New York

Students	Approximately 60 students, all employees of IBM, including electrical testers, clerical workers, technical controllers, communications specialists, analysts, associate engineers, and managers participated in this program.
Content	Programs were primarily in two areas of study: business management and economics, and community and human services.
Schedule	Most students studied half time.
Methods	Students worked individually with faculty members and in small groups.
Faculty	Teachers were mostly faculty members (mentors) from Empire State College.
Location	Learning primarily took place at the IBM offices in Brooklyn.
College services	Empire State College helped students with orientation and information, assessment of prior learning, program planning, choice of teachers, and established a process of learning under contract. The college also handled all administrative functions.
Organization services	IBM provided offices for teachers, as well as facilities for the students, including a small library.
Contract charges	An overall contract was negotiated between IBM and Empire State College: the details are confidential.
Evaluation	Empire State College conducted a comprehensive evaluation that included students, mentors, IBM supervisors, and college administration.
Certification	Associate and bachelor's degrees were awarded to students who completed programs.
Contact	Dean of Metropolitan Regional Center Empire State College 300 Park Avenue South New York, New York 10010

ELECTRICAL AND MECHANICAL ENGINEERING DEGREES FOR TECHNICIANS

University of Portland, Portland, Oregon
Tektronix Inc., Beaverton, Oregon

Students — Approximately 200 production or engineering technicians were trained last year in this ongoing program. All had high school diplomas, 90 percent had taken some college courses, and 50 percent had associate degrees from community colleges.

Content — A variety of courses were offered, including programming, mathematics, modern physics, engineering graphics, statistics, electrical circuits, electronics foundations, data structures, and software engineering. Classes in the humanities were also offered.

Schedule — Two 15-week semesters were held each year. Students attended classes two days each week, from 4 p.m. to 6 p.m., or 6:30 p.m. to 8:30 p.m., on their own time, either before or after their regular work shifts.

Methods — For the most part, lectures were given, supplemented by engineering laboratory sessions that were held on the Portland campus as needed.

Faculty — Approximately 60 percent of the faculty members were from the University of Portland's departments of electrical and mechanical engineering. The remaining faculty members were adjunct faculty employed by the university from industries and other universities in the Greater Portland area.

Location — Courses were held in the education and training building of the company, and in other conference rooms throughout the Tektronix plant.

College services — The University of Portland provided academic counseling for students, registration at the work site, and delivered textbooks to the work site.

Organization services — Tektronix provided the facilities, selected students, scheduled academic counseling, and designed students' work schedules around their class schedules ("flex-time").

Contract charges — Tektronix paid the University of Portland's School of Engineering approximately $225,000 per year—$109 per student, per credit hour (approximately 75 percent of the regular student tuition at the university).

Evaluation — Students completed course evaluations at the end of each course, and student grades were reported both to students and to Tektronix. The university is also conducting a longitudinal study of students' success in job advancement within Tektronix.

Certification — Students who completed each course were awarded academic credit. All courses could be applied to a bachelor's degree in either electrical or mechanical engineering.

Contact — Dean
School of Engineering
University of Portland
5000 North Willamette Boulevard
Portland, Oregon 97203

EXECUTIVE MASTER'S DEGREE PROGRAM IN ADVANCED MANAGEMENT

Pace University, New York, New York
American Telephone and Telegraph Company (AT&T), New York, New York

Students — Approximately 45 middle managers selected for their growth potential within the corporation attended this course. All students were college graduates, and many had advanced degrees, including doctorates. About half the students in attendance were on rotation from operations in other parts of the country.

Context — A series of 12 courses offered over a two-year period were tailored to the management needs of AT&T. Topics covered the functional areas of management, including human behavior in organizations, accounting, finance, economics, marketing, information systems, international business, and a capstone seminar in business policy.

Schedule — Courses met sequentially one day a week for six weeks every Friday. The first and last courses were week-long seminars designed to foster a sense of identity among the students. The course in human behavior met on Saturdays so that spouses could attend.

Methods — Traditional teaching methods included lectures, case studies, group presentations, and audiovisual presentations.

Faculty — Pace University selected a cadre of nationally known experts to teach in their areas of specialization. Fewer than half of the faculty were from Pace University.

Location — Courses were taught in different locations—some at Pace University, some at AT&T in Basking Ridge, New Jersey, and others at conference centers in the Northeast.

College services — Pace University had final responsibility for selecting the students—it assembled the faculty, registered the students on site, delivered books and materials to the teaching sites, and arranged for inter-library loans.

Organization services — AT&T participated in the selection of students, allowed students time off from work, paid for travel expenses, and provided classrooms and meeting facilities as well as technical and audiovisual equipment.

Contract charges — This executive master's degree program in advanced management cost AT&T less per student than a comparable executive MBA program.

Evaluation — The program was evaluated regularly by Pace University, AT&T, students in the program, and outside evaluators.

Certification — Students who completed the two-year, 36-credit program received a master of science degree in advanced management.

Contact — Associate Dean
Lubin Graduate Schools of Business
Pace University
1 Pace Plaza
New York, New York 10038

MANAGEMENT DEVELOPMENT FOR A BUSINESS CONSORTIUM

St. Ambrose College, Davenport, Iowa
Institute for Management Development—a consortium of 23 companies located in the Iowa/Illinois Quad-Cities area. The Institute is located at St. Ambrose College, Davenport, Iowa.

Students	Approximately 78 supervisors, selected by the participating companies for their growth potential, participated in this program. All students were high school graduates and about one third had completed college.
Content	Nine, two-credit courses, leading to a certificate in management. Courses were: interpersonal communications, written communications, principles of management, human-relations management, labor-relations management, principles of marketing, business, government and society, principles of economics, and principles of accounting.
Schedule	St. Ambrose College offered three courses per year. Classes met one night a week during the 11-week semesters. Most of the students completed the program in three years.
Methods	A variety of teaching techniques were used, including lectures, the case method, independent study, and group discussion.
Faculty	About one half of the courses were taught by faculty members from St. Ambrose College. The rest of the courses were taught by faculty hired from member companies of the Institute for Management Development.
Location	All courses were taught on the St. Ambrose College campus.
College services	St. Ambrose College provided registration, administrative functions, classrooms, and other facilities.
Organization services	The participating organizations selected students and appointed a policy-making board to oversee the program.
Contract charges	Tuition and fees were approximately $320 per course. The contract per student was approximately $2,800 for the three-year program.
Evaluation	Students evaluated courses on a regular basis. The board of directors of the Institute for Management Development also conducted an independent evaluation.
Certification	Students were awarded a certificate in management, and earned 18 credits toward a bachelor's degree.
Contact	Dean of Continuing Education St. Ambrose College 518 West Locust Street Davenport, Iowa 52804

MANAGEMENT PROGRAM FOR SUPERVISORS

Worcester State College, Worcester, Massachusetts
State Mutual Life Insurance Company of America, Worcester, Massachusetts
Norton Company, Worcester, Massachusetts

Students	Approximately 100 entry-level supervisors and managers from both companies participated in this management program. Students' educational backgrounds ranged from high school diplomas to college degrees.
Content	This certificate program required seven courses on such topics as human dynamics, problem solving in organizations, management and organizational behavior, computers for management, and budgeting.
Schedule	Courses were offered during afternoons and evenings. Each course involved 37 hours of class instruction.
Methods	Lectures, role playing, and case studies were among the teaching methods used.
Faculty	One fourth of the instructors were faculty members from Worcester State College, the rest were adjunct faculty from the college and from the business community.
Location	Employees from State Mutual Life Insurance Company took all but one of their courses on the Worcester State College campus. Employees from Norton Company split their time between the work site and the college.
College services	Worcester State College provided registration at the work site, academic counseling, and made all campus facilities available to the students.
Organization services	Both companies selected students, provided materials, audiovisual equipment, and some classroom facilities.
Contract charges	The combined contract between Worcester State College, State Mutual Life Insurance Company, and Norton Company was approximately $110,000.
Evaluation	The students evaluated the courses three times during each semester. In addition, the program was evaluated regularly by State Mutual Life Insurance Company and Norton Company.
Certification	Students were awarded certificates in management and supervision, and earned 21 college credits.
Contact	Assistant Director Division of Graduate and Continuing Education Worcester State College Worcester, Massachusetts 01602

MASTER'S PROGRAM IN TOXICOLOGY FOR BIOCHEMICAL PERSONNEL

American University, Washington, D.C.
Litton Industries, Rockville, Maryland
Hazleton Laboratories, Vienna, Virginia

Students	Approximately 160 employees involved in biochemical laboratory work, including laboratory technicians, laboratory supervisors, quality-control experts, and key corporate officers for research were enrolled in this program. All students had bachelor's degrees, some had master's degrees, and some had doctorates.
Content	Thirty-six hours, or 12 graduate credits, on toxic materials. Topics included federal regulations dealing with laboratory animals, effects of toxic substances on the environment, and immunology.
Schedule	Courses were offered during 16-week semesters, and met once a week for three hours in the late afternoon and early evening.
Methods	Traditional teaching methods were used, including lectures, laboratories, and research seminars.
Faculty	Nearly all courses were taught by American University faculty members from the biology and chemistry departments. One course on federal regulations was taught by a professor from the School of Government and Public Administration of American University.
Location	All courses were held at Litton Industries and Hazleton Laboratories.
College services	American University provided on-site registration, an orientation program, and revised the programs, where necessary, in consultation with the contractors.
Organization services	Litton Industries and Hazleton Laboratories provided classrooms, laboratories, and gave students time off from work.
Contract charges	Approximately $450 per student, per course, for a contract of $150,000 at each site.
Evaluation	Students evaluated the program regularly. In addition, the directors of training conducted their own evaluations.
Certification	Students who completed the 36 hours were awarded a master's degree in toxicology.
Contact	Acting Dean of the Division of Continuing Education and Summer Session American University McKinley 107 440 Massachusetts Avenue, N.W. Washington, D.C. 20016

MILLWRIGHTS' APPRENTICESHIP PROGRAM

Washtenaw Community College, Ann Arbor, Michigan
General Motors Corporation, Hydramatic Division, Ypsilanti, Michigan

Students	Approximately 40 machine-repair workers, tool and die workers, and electrical technicians, all of whom had worked for the Hydramatic Division for three to five years, were trained. All had either high school diplomas or GEDs, and several had completed some college courses. These students were trained along with other students serving industry-based apprenticeships with other companies, such as Ford Motor Company, Hoover Ball Bearing, and Chrysler Corporation.
Content	The instruction included technical courses, such as machine-shop theory and practice, welding, drafting, blueprint reading, and technical mathematics, as well as liberal arts courses.
Schedule	Courses were conducted in two 15-week semesters, two days a week, for three hours each day. Courses were taken on the students' own time.
Methods	About 60 percent of the instruction was laboratory work; the remaining 40 percent of instruction was handled through lectures.
Faculty	Most courses were taught by regular full-time and part-time faculty members of Washtenaw Community College, supplemented by the apprenticeship assignments, which were supervised by journeymen millwrights in the Hydramatic Division of General Motors.
Location	All classes were held on the Washtenaw Community College campus, except for the apprenticeship assignments.
College services	Washtenaw Community College provided the traditional support services offered to all their students.
Organization services	The Hydramatic Division managers screened and selected all students and provided the journeymen millwrights to supervise the students.
Contract charges	Because the Hydramatic Division of the General Motors Corporation is located in the area of Washtenaw Community College, the college was paid the minimum $25 per credit hour, per student, for a total contract of approximately $1,125.
Evaluation	Grades were sent both to students and to General Motors Hydramatic Division. Washtenaw Community College administrators and Hydramatic Division managers met quarterly to negotiate program changes where necessary.
Certification	By completing all courses, students were able to earn all but 15 academic credits toward an associate degree. In addition, students were able to meet the qualifications of the Bureau of Apprenticeship and Training of the United States Department of Labor for obtaining a journeyman's card.

Contact

Associate Dean for Occupational Education
Washtenaw Community College
P.O. Box D1
4800 Huron River Drive
Ann Arbor, Michigan 48106

PROFESSIONAL-DEVELOPMENT PROGRAM FOR CHEMICAL ENGINEERS

Washington University, St. Louis, Missouri
Monsanto Company, St. Louis, Missouri

Students — Approximately 18 Monsanto Company engineers attended this professional development program. The company selected students valuable for their knowledge of plant operations but whose engineering and technical skills were obsolete. All students had strong academic records and were willing to undertake a year of intensive retraining. These college graduates had different educational backgrounds, came from different plant locations across the United States, and had held a diversity of responsible positions.

Content — The program offered two options: basic engineering, and digital control of chemical processes. Both options brought students up to date in the use of computer technology, modern computation tools, and analytic methods.

Schedule — Classes met full time for one year during three trimesters. Instruction was provided five days a week from 9:30 a.m. to 5 p.m.

Methods — Traditional teaching techniques included lectures, problem solving, and laboratories.

Faculty — Courses were taught by faculty members from Washington University's School of Engineering, with the exception of one specialist from another university.

Location — All classes met on the Washington University Campus in St. Louis.

College services — Washington University provided counseling, a student meeting room, and faculty (or graduate student) supervision of daily problem-solving sessions.

Organization services — Monsanto Company paid full salaries during the year of retraining as well as moving expenses for students and their families. If a family chose not to relocate, Monsanto paid travel expenses for the student to return home every third weekend. The company also purchased programmable calculators for each student, and made their computer network available to the program.

Contract charges — The charges for the program did not exceed the usual tuition at Washington University. However, tuition was only 20 percent of Monsanto Company's total costs for the program.

Evaluation — Students evaluated courses on a regular basis. Monsanto Company evaluated graduates over a three- to five-year period to gauge employee productivity and the economic feasibility of the program.

Certification — Washington University granted certificates of completion. Some of the credits were applicable toward a degree.

Contact — Chemical Engineering Department
Washington University
University Box 1198
St. Louis, Missouri 63130

TECHNICAL INSTRUCTION FOR ASSEMBLY-LINE WORKERS

Bunker Hill Community College, Boston, Massachusetts
Data Printer Corp, Malden, Massachusetts

Students	Approximately 100 production-line workers at Data Printer Corp attended this course of instruction. Most had high school diplomas or GEDs, and several had completed some college courses.
Content	A variety of electronics courses were offered, including block diagrams, A.C. and D.C. circuits and theory, scientific notation, integrated circuits, semi-conductors, electronics, technical mathematics, industrial technology, and technical assembly-line problems.
Schedule	Courses were scheduled for 12-week semesters, and students attended classes once a week for three hours. Typically, students completed four courses a year. Classes were taken during the workers' own time, usually after 3:30 p.m.
Methods	A variety of techniques included lectures, demonstrations, and technical-assistance laboratories.
Faculty	Most of the courses were taught by faculty members from the electronics and management departments at Bunker Hill Community College.
Location	Classes were held at Data Printer Corp.
College services	Bunker Hill Community College provided registration at the program site, program coordination, academic counseling, and printed course materials.
Organization services	Data Printer Corp provided classrooms, technical and laboratory equipment, and advertised the program.
Contract charges	Data Printer Corp paid Bunker Hill Community College $2,000 to $2,500 per course. The total contract was approximately $25,000.
Evaluation	Students evaluated each session during the pilot program, and completed end-of-course evaluations for the program.
Certification	Courses awarded academic credit toward an associate degree at Bunker Hill Community College.
Contact	Dean of The Open College Bunker Hill Community College New Rutherford Avenue and Gilmore Bridge Boston, Massachusetts 02129

TRAINING IN INTERNATIONAL FINANCE, PLANNING, INFORMATION SYSTEMS, AND ADMINISTRATION

Pace University, Briarcliff Manor, New York
IBM Corporation, Armonk, New York

Students — Approximately 2,500 managers and professional staff attend this course each year. Most employees who attend work in finance-related jobs, while others work in the areas of business planning, information systems, and administration. Many have graduate and/or undergraduate degrees.

Content — Pace University and IBM developed this program to help IBM establish a company school with a business orientation. Pace and other university faculty are used as consultants in instructing, evaluating, and where appropriate, accrediting the IBM training programs. Starting in September 1982, IBM offered approximately 29 courses in accounting, economics, finance, information systems, business planning, and personal development.

Schedule — The courses described here were of one, two, or three weeks' duration. Classes met daily from 8:30 a.m. to 4:30 p.m., or longer if necessary.

Methods — Teaching techniques included lectures, case studies, and audiovisual presentations. In some classes, computers were used.

Faculty — IBM selected specialists from the nationwide academic pool to cover the various subject-matter areas. Pace University faculty also taught some courses.

Location — All courses were held at the IBM International Finance Planning and Administration (IFPA) School on the Pace University campus in Briarcliff Manor, New York.

College services — A committee of Pace University faculty and administration members, appointed by the president of Pace University, evaluated all IBM IFPA course offerings. The committee advised on upgrading courses to credit level and suggested new curricula. The Pace University faculty also helped IBM develop a relevant library collection. A Pace University program manager was available to advise IBM students on academic affairs.

Organization services — IBM developed the curriculum, selected faculty, and provided technical support and computer equipment. IBM also provided administrative coordination for the courses.

Contract charges — IBM paid Pace University an annual, overall fee covering administrative support and registration, student counseling, classrooms, library, dining and recreational facilities, health, food, and transportation services, and academic consultation by Pace faculty and administration.

Evaluation — Pace University evaluated all IBM credit-bearing courses. IBM students seeking credit in credit-bearing courses had to meet the admissions standards, follow the normal enrollment procedures of Pace University, and demonstrate satisfactory completion of the course through completion of Pace University-approved final examinations. Eighteen of the 29 IBM courses have been evaluated as credit-bearing for undergraduate and/or graduate credit.

Certification

During the first four months of operation, following the program's commencement in September 1982, Pace awarded academic credit to approximately 30 IBM IFPA students. Approximately 12 percent of IBM students taking credit-bearing courses have elected to pursue the credit option.

Contact

Vice Provost for Corporate and International Programs
Dean of The Lubin School of Business and Administration
Pace University
Pace Plaza
New York, New York 10038

UNDERGRADUATE DEGREE PROGRAM FOR WHITE-COLLAR WORKERS

Marymount Manhattan College, New York, New York
Pfizer Inc., New York, New York

Students — Approximately 250 white-collar workers with responsibilities ranging from clerical to first-level management participated in this undergraduate degree program. Seventy-five percent of the students were women. About half were in their mid-twenties to mid-thirties, and the rest represented a range in age from 35 to retirement. Most students had high school diplomas or GEDs, and some had college credit. A few had bachelor's degrees and were taking courses as special students.

Content — A variety of undergraduate courses leading to a certificate or baccalaureate degree in business management. In addition, courses in the liberal arts, social sciences, and economics were regularly offered. Students took some courses at the college if they wished to complete the requirements for a different major.

Schedule — Courses met at noon or in the early evening. Each course required two hours and 40 minutes of instruction per week for a total of 37½ hours per semester. The majority of students registered for one course, but several registered for two or three per semester.

Methods — Traditional teaching methods included lectures, discussions, examinations, papers, and audiovisual presentations.

Faculty — Courses were taught by Marymount Manhattan College full-time faculty and adjunct faculty, as well as Pfizer employees who met the college's criteria for instructional staff. Because the program has been running since 1976, a cadre of instructors teach the courses on a regular basis.

Location — Twenty-five courses were offered last year at the Pfizer national headquarters in New York City. Students who wished to accelerate or needed remedial courses were offered instruction on the Marymount Manhattan campus.

College services — In addition to granting students privileges to use college facilities and counseling and advisement services, Marymount Manhattan College assigned a part-time administrator to coordinate services for Pfizer Inc. Services included on-site registration, program advisement, assisting students with advice on financial aid and methods of payment, administering placement examinations, skills review, and adjustment of the calendar to meet Pfizer's needs.

Organization services — Pfizer publicized the program within the company, recruited students, provided tuition reimbursement, and some time off from work. In addition, Pfizer assigned a part-time administrator to serve as liaison to the college who provided additional counseling, on-site registration, help with the application process, and faculty support.

Contract charges — Students paid the regular tuition of $133 per credit and were reimbursed 100 percent by Pfizer upon successful completion of each course.

Evaluation

Instructors were evaluated by peer colleagues and division chairs on the same schedule as the faculty at Marymount Manhattan College. They were also evaluated by students at the end of each semester.

Certification

Students who completed 10 specified courses, or 30 credits in business management, received a certificate. Students who completed the college's requirements for a B.S. or B.A. degree received these degrees.

Contact

Administrator of the Corporate Education Program
Department of Lifelong Learning
Marymount Manhattan College
221 East 71 Street
New York, New York 10021

UNDERGRADUATE LIBERAL ARTS DEGREE FOR COMPANY EMPLOYEES

University of Pennsylvania, Philadelphia, Pennsylvania
CIGNA Corporation (formerly Insurance Company of North Amerca), Philadelphia, Pennsylvania

Students — Approximately 140 employees of CIGNA Corporation (a provider of insurance and financial services), were admitted to the program during its first year. All had high school diplomas. 95 percent of the students were women, many of whom had been out of school for 10 to 15 years. They ranged in age from 25 to 55. Most had not previously held management positions with the company.

Content — Courses included traditional core classes in the liberal arts, such as history, English composition, sociology, economics, psychology, modern American literature, American civilization, and foreign languages. In addition to core courses, there were freshman seminars in drama, short fiction, literature, and human values.

Schedule — Students took courses during the 14-week fall and spring semesters; many attended the 12-week summer session as well. Classes were held once a week from 4:30 p.m. to 7:10 p.m., after the normal work day. Foreign language classes met twice weekly, from 4:30 p.m. to 6:30 p.m.

Methods — Lectures and small group discussions were used extensively by the faculty. Audio-visual materials were frequently used to supplement classroom lectures. Class size was usually 20 per course, though occasionally class size reached 30 to 40 students.

Faculty — All classes were taught by university faculty. They were chosen not only for their subject-area expertise but also for their ability to work with adult learners. Approximately 15 regular faculty members have taught the program.

Location — All classes met in classrooms in CIGNA Corporation's facilities.

College services — The university admitted students, arranged for in-plant registration, and provided academic counseling. It also issued identification cards, which allowed the students to use all facilities of the university.

Organization services — CIGNA Corporation provided classroom facilities, office space for the program administrator, tutoring for students, promotion of the program among all employees, and travel stipends for university faculty members.

Contract charges — The company paid the University of Pennsylvania $335 per student, per three-hour credit course, $10 per hour for student tutoring, a faculty travel stipend of $300 per course, half salary of the program administrator, and full salary of the half-time program assistant. The total training contract for one year was approximately $100,000.

Evaluation — The services of a third-party evaluator were included in the contract. A complete program evaluation report is available on the first year of program operation. The report includes the opinions of students, the company's managers and administrators, and faculty members and administrators from the University of Pennsylvania.

Certification

All students were given academic credit for each completed course. Students can earn a bachelor's degree in social sciences from the University of Pennsylvania within six years if they complete two courses each semester and a summer session each year.

Contact

Pennsylvania/CIGNA Coordinator
College of General Studies
University of Pennsylvania
210 Logan Hall
Philadelphia, Pennsylvania 19104

I. CONTRACTS WITH BUSINESS AND INDUSTRY

B. Certificate Programs and Noncredit courses

BUSINESS AND MANAGEMENT FOR SENIOR EXECUTIVES

Carnegie-Mellon University, Graduate School of Industrial Administration, Pittsburgh, Pennsylvania
Goodyear Corporation, Akron, Ohio

Students — Approximately 250 senior executives representing every major line and staff function in both the domestic and international divisions of the Goodyear Corporation were trained. All had previous college preparation, and many had undergraduate and graduate degrees.

Content — Both the international and domestic programs concentrated on current management practices and contemporary issues in accounting, finance, economics, marketing, and strategic planning.

Schedule — Eight two-week sessions were held over a two-year period. During each two-week session, students attended classes Monday through Friday, from 8:30 a.m. to 5 p.m.

Methods — Much of the instruction was through small group discussions of case studies that had been assigned as prior reading.

Faculty — The domestic programs were taught by regular faculty members from Carnegie-Mellon University. The international programs were taught by adjunct faculty members, expert in international management, supplemented by regular faculty members from Carnegie-Mellon University.

Location — Senior executives from the domestic division of Goodyear attended the appropriate domestic programs at the Carnegie-Mellon campus, while senior executives from the international division attended sessions in Spain, Hawaii, or Florida.

College services — Carnegie-Mellon University provided all instructional materials and a social program for the two-week sessions.

Organization services — Goodyear Corporation selected students, determined who attended which sessions, provided students time off from work to attend, and provided travel and per diem expenses.

Contract charges — Charges by Carnegie-Mellon University for this training were confidential.

Evaluation — Students completed a questionnaire at the end of each two-week session. Carnegie-Mellon University also judged the success of the first program by its continued contracting with Goodyear for "update sessions" of two or three days, which were scheduled after students had returned to their jobs.

Certification — Certificates of completion were given at the end of each two-week session.

Contact — Dean
Graduate School of Industrial Relations
Carnegie-Mellon University
5000 Forbes Avenue
Pittsburgh, Pennsylvania 15213

BUSINESS-COMMUNICATIONS WORKSHOP FOR DATA PROCESSORS

University College of Widener University, Wilmington, Delaware
Colonial Penn Group, Philadelphia, Pennsylvania

Students	Approximately 15 data-processing employees of the Colonial Penn Group attended the business-communications workshop.
Content	Topics included skills development in analyzing, organizing, listening, speaking, writing, and initiating effective business communications.
Schedule	This three-day workshop met from 9 a.m. to 3 p.m., for a total of 15 hours of instruction.
Methods	The training included group discussions, workbooks, "learning packets," and audiovisual presentations.
Faculty	The sessions were taught by an adjunct instructor from University College.
Location	The seminar was held at the Colonial Penn Group facilities.
College services	University College of Widener University provided textbooks, workbooks, and audiovisual materials.
Organization services	The Colonial Penn Group selected the participants and gave them time off from work, facilities for classrooms, and audiovisual equipment.
Contract charges	The contract was $1,940 for the 15-hour seminar.
Evaluation	Students evaluated the course at its completion.
Certification	No certificates were issued.
Contact	Assistant Director of University College Widener University Box 7139 Concord Pike Wilmington, Delaware 19803

DEALER-TECHNICIAN TRAINING FOR GENERAL MOTORS (GM) AUTOMOTIVE SERVICE PERSONNEL

General Motors Corporation, Warren, Michigan
Approximately 28 Colleges throughout the United States

Students	An estimated 25,343 experienced GM dealer technicians underwent this training to upgrade their skills in repairing and servicing new GM vehicles.
Content	A selection of short-term training programs were designed to update experienced technicians in servicing and repairing recent General Motors products.
Schedule	Short-term training sessions ranged from one to three days, depending on the needs of the dealers.
Methods	Teaching methods in both programs included lectures, laboratories, and hands-on experience with GM products. Most classes had a low (8:1) student-to-instructor ratio.
Faculty	Faculty, selected from the cooperating colleges, were trained by General Motors in the servicing and repair of their automotive and light-truck products. A spinoff of the faculty retraining was that it enabled colleges to teach up-to-date automotive technology courses in General Motors automotive products.
Location	Short-term training was held at selected colleges as well as at the 31 General Motors training centers.
College services	In the instances where training was conducted on campus, the colleges provided space or facilities. Administrative functions were carried out jointly.
Organization services	General Motors provided up-to-date equipment, including components, special tools, and vehicles to facilitate training on the campuses. The colleges were also able to use this equipment for courses other than the General Motors series. Course fees were paid by GM dealers enrolling students in the courses.
Contract charges	Contracts varied from college to college. No total contract figure is available.
Evaluation	The programs were evaluated regularly by the students, the college faculty, General Motors dealers, and General Motors management. General Motors Corporation shared the results of their evaluation with the colleges involved.
Certification	General Motors awarded a certificate of attendance for all noncredit courses.
Contact	National College Coordinator Product Service Training General Motors Corporation 30501 Van Dyke Warren, Michigan 48090-9002

DEVELOPMENTAL SKILLS FOR TELEPHONE COMPANY EMPLOYEES

New York City Technical College, New York, New York
New York Telephone Company, New York, New York

Students	Approximately 250 employees of the New York Telephone Company, all of whom were employed in a variety of nonmanagerial jobs, participated in this program. Most students were high school graduates ranging in age, and came from a variety of ethnic backgrounds.
Content	Courses were offered in three levels of developmental mathematics, language skills, and business-writing skills.
Schedule	Courses were given during the evenings, one night a week, over a 15-week semester period. Five courses were offered each semester.
Methods	Techniques included lectures, discussions, and problem solving.
Faculty	Adjunct faculty were hired to teach all courses.
Location	Courses were offered on the Manhattan and Brooklyn campuses of New York City Technical College.
College services	New York City Technical College provided all administrative functions, and student advising.
Organization services	New York Telephone Company assigned a corporate coordinator to serve as liaison to the program, who worked with and counseled students.
Contract charges	The contract was based on a per-class-hour fee. Students paid one quarter of their tuition.
Evaluation	Students evaluated each course at the end of the semester. Students' work was evaluated by teachers on an ongoing basis and at the conclusion of the semester.
Certification	Certificates of completion were awarded to all students who completed courses.
Contact	Coordinator of Contract Programs New York City Technical College Division of Continuing Education Voorhees Campus 450 West 41 Street, Room 501 New York, New York 10036

ENGLISH-AS-A-SECOND-LANGUAGE FOR HOSPITAL EMPLOYEES

Roxbury Community College, Boston, Massachusetts
New England Deaconess Hospital, Boston, Massachusetts

Students	Approximately 100 hospital employees from the dietary, maintenance, and environmental-service departments of New England Deaconess Hospital participated in this course. A large majority of the students were older women who were non-English speaking immigrants. Most had not graduated from high school.
Content	A sequence of two 16-week courses. The elementary course covered pronunciation, basic elements of grammar, idiomatic usage, and basic vocabulary most relevant to the work environment. The intermediate course, designed for those with more facility for the language, covered pronunciation, grammar, vocabulary, complicated idiomatic usages, conversation, and writing skills.
Schedule	Courses met twice a week for 16 weeks, usually from 7 a.m. to 8 a.m.
Methods	Teaching included drills, exercises, dialogues, role playing, and simulation.
Faculty	Courses were taught by faculty members from Roxbury Community College.
Location	All courses were taught at New England Deaconess Hospital.
College services	Roxbury Community College provided on-site registration, and academic counseling.
Organization services	The New England Deaconess Hospital provided classroom space, recruited students, selected students, allowed them time off from work to attend classes, and paid the full cost of the courses.
Contract charges	The cost was approximately $120 per student, per semester for an approximate contract of $12,000.
Evaluation	Students completed questionnaires evaluating the courses. The training manager at the hospital also conducted an evaluation.
Certification	Roxbury Community College awarded certificates of completion.
Contact	Director of Development Roxbury Community College 625 Huntington Avenue Boston, Massachusetts 02115

FIRST-AID TRAINING FOR PRODUCTION SUPERVISORS

Eastern Illinois University, Charleston, Illinois
Trailmobile Company, Charleston, Illinois

Students	Approximately 20 production foremen and supervisors from the Trailmobile Company participated in this training. Most students were high school graduates.
Content	The course included instruction in basic first aid and cardiopulmonary resuscitation.
Schedule	Students attended three weeks of classes. Sessions met three evenings a week, from 7 p.m. to 9 p.m.
Methods	Training techniques included demonstrations and lectures.
Faculty	Training was taught by faculty from the Eastern Illinois University health-education department.
Location	All classes were held on the Eastern Illinois University campus.
College services	Eastern Illinois University designed the program, provided registration, issued contracts, and provided follow-up course evaluations.
Organization services	Trailmobile Company selected the students.
Contract charges	Course fees were waived, but Eastern Illinois University charged the Trailmobile Company $180 to cover general course materials.
Evaluation	All students completed an evaluation questionnaire.
Certification	Students received certificates of completion.
Contact	Director Office of Public Service and Development Eastern Illinois University Charleston, Illinois 61920

GENERAL-EDUCATION LECTURE SERIES

Fairfield University, Fairfield, Connecticut
Champion International Corporation, Stamford, Connecticut

Students — All 700 employees of Champion International's corporate headquarters in Stamford were eligible to attend this lunchtime, general-education lecture series. About 50 employees have attended each of the seven programs offered so far. Their educational backgrounds were mixed, but most participants were college graduates, and some had graduate degrees. They ranged from senior- and junior-level executives to secretaries and clerical workers.

Content — The lecture series was designed to be of a general educational interest. Recent titles included: "America in the 1980s," an overview of contemporary problems as seen by professors of political science, history, English, and economics; "Childhood and Adolescence," by members of Fairfield University's Psychology Department; and "Psychology Faces the 1980s," a look at the problems, old and new, being faced by modern society.

Schedule — Each program ran from four to seven weeks, one lecture a week, which was held on Fridays from 12:15 p.m. until 1 p.m.

Methods — The teaching method used was primarily lecturing, with some use of slide shows. There was also a question period at the end of each session. An optional reading list was given for those who wished to participate in the reading assignments.

Faculty — All the lectures were given by faculty members of Fairfield University. There were a number of faculty members for each program, generally one member per session. Currently, only members of the College of Arts and Sciences have been involved, but there is an effort to include other schools of the university, such as nursing and business.

Location — All lectures were held at Champion International's corporate headquarters in Stamford, Connecticut.

College services — Fairfield University provided the faculty for the lectures.

Organization services — Champion International provided the forum for this series of lectures, the students (all interested employees), and any equipment needed by the faculty.

Contract charges — Champion paid the university about $350 per lecture, which included an honorarium, funds for coordination of the series, and a small amount for the Faculty Research Fund.

Evaluation — Each program was evaluated by the employees through an internal questionnaire, which was circulated after the series of lectures.

Certification — This was a noncredit program.

Contact — Associate Professor of Politics
Fairfield University
Fairfield, Connecticut 06430

MANAGEMENT TRAINING FOR CUSTOMER-SERVICE REPRESENTATIVES

Indiana Vocational Technical College, Indianapolis, Indiana
American Fletcher National Bank, Indianapolis, Indiana

Students	Approximately 1,400 customer-service representatives from the American Fletcher National Bank participated in this training. All were high school graduates, and some had completed some college courses.
Content	Topics were banking-specific and included: human relations, interpersonal communications, management concepts, and effective letter writing.
Schedule	Training sessions met from 9 a.m. to 5 p.m., and were scheduled for one or two days, according to the needs of the bank.
Methods	A variety of training methods were used, including lectures, role playing, and laboratory practices.
Faculty	Training was provided by faculty members and adjunct faculty from Indiana Vocational Technical College.
Location	Classroom facilities were provided by the bank.
College services	Indiana Vocational Technical College planned the course.
Organization services	The American Fletcher National Bank selected students, scheduled classes, and provided registration and classroom facilities.
Contract charges	American Fletcher National Bank paid $250 to $600 for seminars of one or two days. A total of 29 training days were provided at an annual contract price of $7,350.
Evaluation	Students evaluated the training at the end of each session.
Certification	Students were awarded certificates of completion.
Contact	Director of Industrial Training and Development Indiana Vocational Technical College – Region 08 1315 East Washington Street Indianapolis, Indiana 46202

MANAGEMENT TRAINING FOR DEALERSHIPS

Modesto Junior College, Modesto, California
Allis Chalmers Corporation, Milwaukee, Wisconsin

Students	Approximately 20 owners of Allis Chalmers dealerships in the western United States attended this management training. All were high school graduates, and some had college backgrounds.
Content	Training covered such topics as management by objectives, making management-by-objectives work, psychology of management, motivation, and fiscal analysis of dealerships.
Schedule	This week-long course offered 39 hours of training.
Methods	Lectures, case studies, group discussions, role playing, and audiovisual presentations were used as methods of instruction.
Faculty	Teachers were faculty members from the department of agriculture at Modesto Junior College.
Location	All training was held at Modesto Junior College.
College services	The college provided administrative and secretarial services, and a bus to and from the hotel where the students stayed while attending the course.
Organization services	The Allis Chalmers Corporation developed the curriculum, the written materials, and trained the faculty.
Contract charges	The contract was $3,000.
Evaluation	Students evaluated the course and the instructor.
Certification	Certificates of completion were awarded.
Contact	Coordinator, Special Projects Modesto Junior College Modesto, California 95359

MANAGEMENT TRAINING FOR SUPERVISORS

Albany Junior College, Albany, Georgia
Miller Brewing Company, Albany, Georgia

Students	Approximately 18 managers and supervisors, ranging in education from high school graduation to master's degrees, participated in this management-training program for supervisors.
Content	A variety of noncredit courses were offered, including time management, finance for nonfinancial managers, written communications, oral communications, and persuasion.
Schedule	Classes met 15 hours per academic quarter, and were offered both during the day and in the evening.
Methods	Lectures, group process, role playing, seminars, and conferences were among the teaching techniques used.
Faculty	Instructors were faculty members and adjunct faculty from the business division of Albany Junior College.
Location	All courses were taught at the Miller Brewing Company's facilities.
College services	Albany Junior College provided scheduling, counseling, and made all facilities available to students.
Organization services	Miller Brewing Company determined the demand for the courses, advertised, designed an evaluation, and provided flexible work time for students attending courses.
Contract charges	The contract was approximately $1,200 per course, per quarter.
Evaluation	Students completed an evaluation at the end of the program.
Certification	Students were awarded certificates of completion by Miller Brewing Company.
Contact	Chairman of Business Division Albany Junior College 2400 Gillionville Road Albany, Georgia 31707

MANAGEMENT TRAINING FOR TUGBOAT DISPATCHERS

Seattle Central Community College, Seattle, Washington
Foss Launch and Tug Company, Seattle, Washington

Students	Twelve tugboat dispatchers from the Foss Launch and Tug Company participated in this management-training course. The participants ranged in age from the late twenties to the mid-fifties. They had diverse work experience and varying educational backgrounds.
Content	A variety of management topics were covered, including employee supervision and performance evaluation, problem solving, management of marine personnel, communicating with confidence, manpower scheduling, marketing, and customer relations.
Schedule	The course was held twice weekly for two hours over a period of 12 weeks.
Methods	Teaching techniques included reading materials, lectures, group discussions, and video presentations.
Faculty	The course was taught by a part-time faculty member from Seattle Central Community College.
Location	All courses were offered at the Foss Launch and Tug Company.
Organization services	Foss Launch and Tug Company provided classroom space, audiovisual hardware, and training materials relating to company policy.
Contract charges	The contract was $6,500 for the 12-week course.
Evaluation	Students completed course evaluations. The program was also evaluated by the Foss Launch and Tug Company.
Certification	Seattle Central Community College awarded certificates of completion.
Contact	Director of Contract Education Services Seattle Central Community College 300 Elliott Avenue West Seattle, Washington 98119

MICROCOMPUTER INSTRUCTION FOR TECHNICIANS

Piedmont Technical College, Greenwood, South Carolina
Monsanto Textiles Company, Greenwood, South Carolina

Students	Approximately 60 Monsanto Textiles Company maintenance technicians attended this course and all were high school graduates.
Content	A variety of computer courses were offered, including basic programming, computers for managers, microcomputer applications, and robotics.
Schedule	Courses were held for 10 weeks, two days a week, three hours a day. Most classes were held between 9 a.m. and noon. Some short seminars were also held.
Methods	Techniques included lectures, laboratory problem solving, and testing procedures.
Faculty	Classes were taught by Piedmont Technical College faculty from the Department of Electrical Engineering.
Location	Classes met at the Monsanto Textiles Company.
College services	Piedmont Technical College provided equipment, materials, and supplies.
Organization services	Monsanto Textiles Company selected students and provided classrooms, textbooks, advertising for the program, and time off from work.
Contract charges	The contract was approximately $2,000, or $15 for each instructional hour.
Evaluation	Students completed a questionnaire at the end of each course.
Certification	All courses were noncredit. Students were offered CEUs.
Contact	Director of Robotics Center Piedmont Technical College P.O. Drawer 1467 Greenwood, South Carolina 29648

MICROCOMPUTER INSTRUCTION FOR SUPERVISORS

Eastern Illinois University, Charleston, Illinois
General Electric Corporation, Mattona, Illinois

Students	Approximately 20 supervisors from the General Electric Corporation plant in Mattona attended this course in microcomputer instruction. All students were high school graduates, and about half had completed some college courses.
Content	This noncredit training program included programming, and the use of microcomputers.
Schedule	The training consisted of five, one-day sessions, which met for three hours a day. Classes were usually held once a week.
Methods	Methods of training included lectures and individualized instruction on microcomputers.
Faculty	An adjunct faculty member was hired from a local computer company in addition to the regular faculty from Eastern Illinois University.
Location	Classes were divided between the General Electric Corporation plant and the computer company in Charleston, Illinois.
College services	Eastern Illinois University designed the program, provided registration, issued contracts, and provided follow-up evaluation.
Organization services	General Electric Corporation chose participants, helped plan the program, and provided classroom space.
Contract charges	The contract was approximately $4,500.
Evaluation	Each student completed a questionnaire at the end of training.
Certification	Students received certificates of completion.
Contact	Director Office of Public Service and Development Eastern Illinois University Charleston, Illinois 61920

PRE-RETIREMENT WORKSHOPS FOR TOP MANAGERIAL STAFF, PRODUCTION WORKERS, CLERICAL STAFF, AND SUPERVISORS

North Texas State University, Denton, Texas
General Dynamics Corporation, Forth Worth, Texas

Students — Approximately 500 production workers, clerical staff, and supervisors at or near retirement age attended these workshops.

Content — Workshop topics covered financial planning (budgeting, personal investments, estate planning, Social Security benefits), health-care planning (nutrition, exercise, aging), and interpersonal relationships.

Schedule — Four six-week workshops were held each year. Each workshop met once each week for 2½ hours, from 7 p.m. to 9:30 p.m.

Methods — Lectures, discussions, and films were used.

Faculty — Faculty and staff from the Center for Studies in Aging and the School of Business of North Texas State University conducted the workshops, with an occasional outside consultant invited as guest lecturer.

Location — All workshops were held in the General Dynamics Corporation's recreation building.

College services — North Texas State University designed the series, developed the workshop materials, and provided a staff member to coordinate the series.

Organization services — General Dynamics Corporation provided facilities for the workshops, printed workshop materials, promoted the workshops among its employees, selected students, and supplied the necessary instructional equipment.

Contract charges — General Dynamics Corporation and North Texas State University negotiated a fixed annual fee for each set of workshops. The fee for the first series was $2,000. The university set a maximum enrollment of 75 students per workshop.

Evaluation — Students evaluated each workshop on both content and presentation. Copies of the evaluations were sent to the faculty members and to managers at General Dynamics Corporation. Using these evaluations, the Center for Studies in Aging and the Department of Employee Services at General Dynamics planned subsequent workshops.

Certification — Each student received a certificate of attendance signed by the university and the General Dynamics Corporation.

Contact — Program Specialist
Center for Studies in Aging
North Texas State University
P.O. Box 13438
Denton, Texas 76203

PROBLEM SOLVING AND DECISION MAKING FOR ENGINEERS

University of Dayton, Dayton, Ohio
Corning Glass, Greenville, Ohio

Students	Twenty engineers from Corning Glass attended this course. Most students had undergraduate degrees in engineering, and some had completed master's degrees.
Content	Courses included probability and statistics, tools of operations research, engineering economy, experimental design, and problem solving.
Schedule	Five courses ran for five weeks each over a six-month period. Courses met for seven hours for the first week (from 8:30 a.m. to 4.30 p.m.), and four hours for each of the next four weeks (from 8:30 a.m. to 12:30 p.m.). All the sessions were held on company time.
Methods	Lectures. laboratories, problem solving, and case studies were among the teaching methods used.
Faculty	Faculty members from the University of Dayton School of Engineering conducted the courses.
Location	Classes were held in training facilities at Corning Glass.
College services	The University of Dayton provided all administrative services and offered use of their bookstores and libraries to the students.
Organization services	Corning Glass selected students, provided classrooms, a project coordinator, and allowed students time off from work.
Contract charges	The contract was $31,355 for the six-month program.
Evaluation	Students completed an evaluation questionnaire for each course.
Certification	The University of Dayton issued certificates of completion. Courses could be taken for CEUs.
Contact	Assistant Dean for Special Programming School of Education Division of Continuing Education University of Dayton 300 College Park Dayton, Ohio 45469

SUPERVISORY SKILLS FOR BANK EMPLOYEES

University of Toledo, Toledo, Ohio
Bank Personnel Managers Association, Toledo, Ohio

Students	Approximately 20 entry-level and middle-management employees from 12 Toledo-area banks attended this course.
Content	Topics included supervisory skills and bank management.
Schedule	Students met during four evening sessions (four hours each) for a total of 16 hours of instruction.
Methods	A variety of methods tailored to the banking industry included lectures, group discussion, videotaped role playing, and case studies.
Faculty	The program was taught by professors of business from the University of Toledo.
Location	Training was held at several Toledo-area banks.
College services	The University of Toledo provided registration, videotaping equipment, and all instructional materials.
Organization services	The banks selected participants, provided the classrooms, and allowed time off from work when necessary.
Contract charges	Contract charges for this program were $3,500.
Evaluation	Students completed evaluation questionnaires for each session. The Bank Personnel Managers Association also conducted an evaluation.
Certificate	Students earned 1.6 CEUs for the training.
Contact	Dean Continuing Education Center University of Toledo 2801 West Bancroft Toledo, Ohio 43606

SUPERVISORY TRAINING FOR COAL MINERS

Southeast Community College, Cumberland, Kentucky
Eastover Mining Company, Brookside, Kentucky

Students	Approximately 90 foremen and supervisors from the Eastover Mining Company, whose responsibilities included enforcement of Occupational Safety and Health Administration (OSHA) regulations, supervision of coal production, and equipment maintenance, attended this supervisory training program. Some had not completed high school.
Content	Topics included time management, coping with stress, and interpersonal relations.
Schedule	Training took place over a two-day period. Classes met between 8:30 a.m. and 9:30 p.m.
Methods	Training methods included lectures and demonstrations.
Faculty	Southeast Community College faculty conducted the training.
Location	Training was held at the Eastover Mining Company headquarters.
College services	Southeast Community College conducted registration and provided instructional aids and films.
Organization services	Eastover Mining Company selected the participants, provided time off, and contributed space.
Contract charges	The contract for the program was $1,650.
Evaluation	Participants evaluated each training session.
Certification	Students earned 1.5 CEUs.
Contact	Acting Director Southeast Community College College Road Cumberland, Kentucky 40823

TECHNICAL TRAINING FOR AUTOMOTIVE PERSONNEL

Kent State University, Trumbull Campus, Warren, Ohio
General Motors Corporation, Parma, Ohio

Students	Approximately 10 employees of General Motors dealerships, including dealers, salesmen, and technicians, participated in this technical-training course. Most students were high school graduates, and some had taken college courses.
Content	Several courses were offered covering the use of automotive computers, including computer-command control and Basic computer language, repair and maintenance of the 6.2L Diesel, Varajet carburetor, and the Isuzu engine. Several automatic-transmission classes were also held.
Schedule	Classes were scheduled for either one day (eight hours) or two days (sixteen hours).
Methods	Most of the training involved laboratory and work-site experience.
Faculty	Kent State University faculty members taught all courses.
Location	Courses were taught both at General Motors in Parma, and at the automotive technical laboratory on the Kent State University campus.
College services	Kent State University provided administrative services and some classrooms. Campus facilities were also available for students' use.
Organization services	General Motors Corporation advertised the courses, developed the curriculum and teaching materials, and provided some classroom space.
Contract charges	General Motors paid $290 per day for training on the Trumbull Campus, and $240 per day for training at the company's headquarters in Parma.
Evaluation	Students were asked to complete an evaluation of both the course content and the instructors.
Certification	Kent State University awarded a certificate of completion.
Contact	Coordinator, Special Programs Kent State University, Trumbull Campus 4314 Mahoning Avenue Northwest Warren, Ohio 44483

II. CONTRACTS WITH GOVERNMENT AGENCIES AND VOLUNTARY ASSOCIATIONS

A. Degree Programs and Credit Courses

ALCOHOL-ABUSE TREATMENT AND TRAINING PROGRAM FOR STATE EMPLOYEES

Russell Sage College, Albany, New York
New York State Department of Correctional Services, Albany, New York
New York State Division of Alcoholism and Alcohol Abuse, Albany, New York
The Mission Society of New York City

Students — Approximately 250 employees of the New York State Department of Correctional Services, including counselors, chaplains, supervisors, and guards attended this alcoholism-treatment training program. Many of the students were college graduates, others had completed some college courses.

Content — A three-credit course dealing with the physiological and psychological issues involved in alcohol abuse, which included definitions of alcoholism, economic and social effects of alcoholism, alcohol and corrections, alcohol and health, personality and alcohol, as well as development of helping skills and use of groups such as Alcoholics Anonymous.

Schedule — The course ran for one week and was offered several times. Students attended classes for eight hours a day. There were also some two-day, noncredit courses.

Methods — Teaching methods included group discussions, role playing, audiovisual presentations, and discussion of reading materials that had been sent to students in advance.

Faculty — The course was taught by faculty members, a biologist and a psychologist who worked as a team, from Russell Sage College. A representative of the Mission Society of New York City served as a resource.

Location — All credit courses were taught at the New York State Department of Correctional Services Training Center in Albany. Noncredit courses were offered at various correctional facilities.

College services — Russell Sage College provided on-site registration, developed the curriculum, and provided a manual for participants.

Organization services — The New York State Department of Correctional Services selected the students, provided facilities, meals, and time off from work.

Contract charges — The New York State Division of Alcoholism and Alcohol Abuse paid approximately $26,000 for training the participants.

Evaluation — Students evaluated each course, as did the Department of Correctional Services.

Certification — Students received three academic credits for the week-long course. Shorter courses offered no credit.

Contact — Dean of Continuing Education
Russell Sage College
140 New Scotland Avenue
Albany, New York 12208

ALLIED HEALTH PROGRAMS FOR MILITARY PERSONNEL

Creighton University, Omaha, Nebraska
United States Army Academy of Health Sciences, Fort Sam Houston, San Antonio, Texas

Students	Approximately 1,000 military personnel participated in these programs. Their educational backgrounds ranged from high school diplomas to baccalaureate and master's degrees.
Content	Five health programs were provided to train participants as dental laboratory specialists, dental hygienists, pharmacy specialists, physicians' assistants, and x-ray technicians.
Schedule	Programs ranged from three months to two years. All classes met between 7:30 a.m. and 4:30 p.m., five days a week.
Methods	A variety of instructional methods were used, including lectures, self-paced computer instruction, and laboratory and clinical rotation.
Faculty	Most instructors were army personnel; a few were civilians.
Location	Classes were held at the United States Army Academy of Health Sciences in Fort Sam Houston. In addition, many of the programs involved clinical rotation at army medical centers on army bases around the country.
College services	Creighton University provided registration, appointment of adjunct faculty, college credits, and evaluation of prior learning.
Organization services	The United States Army Academy of Health Sciences selected participants, scheduled courses, provided books and instructional materials, a learning-resource center, and an audio laboratory.
Contract charges	This information was not available.
Evaluation	Programs were audited and evaluated by faculty members from Creighton University.
Certification	Depending on the program, credits were applicable toward associate or baccalaureate degrees.
Contact	Director Allied Health Sciences Division Creighton University Omaha, Nebraska 68178

CRISIS-INTERVENTION TRAINING FOR SOCIAL-SERVICE WORKERS

Rio Salado Community College, Phoenix, Arizona
Arizona Department of Economic Security, Phoenix, Arizona

Students Approximately 100 paraprofessional counselors and middle managers from the Arizona Department of Economic Security participated in this training. Many students were high school graduates, and some had completed some college courses.

Content A variety of topics were covered on professional growth, coping with stress, agency management, and management-information systems.

Schedule The program ran for two 15-week semesters. Students attended classes two days a week for eight hours a day.

Methods Role playing, small group discussions, and faculty demonstrations were the primary teaching methods.

Faculty Fifteen adjunct faculty, all professional counselors, were selected and trained to teach the program. Rio Salado Community College has no regular faculty.

Location Classes were held at the Phoenix Jewish Community Center. Rio Salado Community College has no campus.

College services Rio Salado Community College conducted orientation workshops for teachers and provided registration at the work site.

Organization services The Arizona Department of Economic Security advertised the program, selected the participants, and gave employees time off from work.

Contract charges The Arizona Department of Economic Security paid $70 for each course and a $35 registration fee: total contract was approximately $10,500.

Evaluation Students evaluated each session.

Certification Academic credits for all courses were applicable toward an associate degree in general studies.

Contact

Dean
Rio Salado Community College
135 North Second Avenue
Phoenix, Arizona 85003

DEGREE PROGRAM FOR SALVATION ARMY OFFICERS

Azusa Pacific University, Azusa, California
The Salvation Army School for Officer Training, Palos Verdes, California

Students Sixty-four students from western states, in training to assume assignments as officers in the Salvation Army, participated in this degree program. All students had completed high school, and about half had taken some college courses.

Content Nine videotaped courses (or 27 units), comprising the general studies component of an associate of arts degree, were offered. The nine courses were: psychology, philosophy, sociology, history of religion in America, world civilization, communications, and the fine arts. The videotapes were produced between 1976 and 1982, through a national consortium of colleges.

Schedule Classes were scheduled by The Salvation Army.

Methods All Azusa Pacific University courses were videotaped lectures, accompanied by a textbook and a study guide. A Salvation Army instructor conducted each course, answered questions, monitored assignments, and administered examinations.

Faculty Each instructor, or proctor, from The Salvation Army was approved by the academic dean of Azusa Pacific University.

Location Various locations were used; no details were available.

College services Azusa Pacific University provided tests and study guides, registration, and financial aid (BEOG) for those pursuing an associate of arts degree, and academic counseling for students planning to transfer to a bachelor's degree program.

Contract charges Tuition was $60 per semester unit ($180 per course). Students registered for from three to twelve units per semester. The total contract for 64 students for one year was approximately $48,000.

Evaluation Students evaluated the videotapes, the instructors, the tests, study guides, and the library. Instructors and The Salvation Army education director also evaluated the course material.

Certification Students who completed the program (27 units from Azusa Pacific University and 33 units from The Salvation Army School for Officer Training) were awarded an associate of arts degree in general education by Azusa Pacific University.

Contact
Director
University College
Azusa Pacific University
Highway 66 at Citrus
Azusa, California 91702

ELECTRONICS TRAINING FOR PRODUCTION WORKERS

College of San Mateo, San Mateo, California
California Work-site Education and Training Act (CWETA), in consortium with Hewlett-Packard Co., Litton Industries Inc., Apple Computer Inc., Ampex Corporation, Siltec Corporation, Watkins-Johnson, and others in the San Mateo area.

Students — Approximately 600 electronics-production workers in high-technology companies in the San Mateo area attended this training program. All participants had high school diplomas or GEDs.

Content — Courses included modules in digital training, A.C. electronics, D.C. electronics, and semiconductors.

Schedule — The average length of training was four months. Most students participated in three hours of instruction per week.

Methods — All training was competency based, self-paced instruction scheduled during the workers' regular shifts. Microcomputers were used extensively.

Faculty — 80 percent of the teachers were associated with the industrial consortium; 20 percent were faculty members from the technical divisions of the College of San Mateo.

Location — All instruction was held at learning stations in the consortium companies.

College services — The College of San Mateo provided instructional materials and tapes.

Organization services — The consortium selected participants, provided facilities, instructional equipment, and time off from work.

Contract charges — This information was not available.

Evaluation — A professional evaluator assessed the program. One of the gauges of success was professional advancement.

Certification — Participants were eligible to receive academic credit by examination, or could take the courses for no credit.

Contact — Electronics Division Director
College of San Mateo
1700 West Hillsdale Boulevard
San Mateo, California 94402

EMPLOYEE-DEVELOPMENT PROGRAM

Rio Salado Community College, Phoenix, Arizona
Arizona Department of Economic Security, Phoenix, Arizona

Students Approximately 650 paraprofessional counselors and employees below the management level from the Arizona Department of Economic Security attended this employee-development program. Many students were high school graduates, and some had completed some college courses.

Content A variety of topics were covered on professional growth, coping with stress, agency management, written communication, and management-information systems.

Schedule The program ran for two 15-week semesters. Students attended classes two days a week, eight hours a day.

Methods Role playing, small group discussions, and faculty demonstrations were the primary teaching methods.

Faculty Fifteen adjunct faculty, all professional counselors, were selected and trained to teach the program. Rio Salado Community College has no regular faculty.

Location Classes were held at the Phoenix Jewish Community Center. Rio Salado Community College has no campus.

College services Rio Salado Community College conducted orientation workshops for teachers and provided registration at the work site.

Organization services The Arizona Department of Economic Security advertised the program, selected participants, and gave employees time off from work.

Contract charges The Arizona Department of Economic Security paid $11 for each one-credit course. Each student attended three courses. The total contract was $20,000, or $10,000 for the semester.

Evaluation Students evaluated each session.

Certification Academic credits on a pass/fail basis were awarded for all courses. Credits are applicable toward an associate degree in general studies.

Contact

Associate Dean of Education
Rio Salado Community College
135 North Second Avenue
Phoenix, Arizona 85003

ENGINEERING DEGREE FOR AIR FORCE RECRUITS

University of Dayton, Dayton, Ohio
United States Air Force, Logistics Command, Dayton, Ohio

Students — Twenty-five college graduates with undergraduate and, in many cases, graduate degrees in mathematics and science undertook this course. On completion of the program, students were guaranteed appointments in the United States Air Force or civilian employment at one of five bases in the Air Force Logistics Command.

Content — Courses taught included circuit analysis, field theory, mechanics, electronics systems, microprocessors, thermodynamics, Fortran, communications theory, economics, and professional development.

Schedule — A 12-month program comprised three trimesters of 15 weeks. Evening or day courses were offered.

Methods — Lectures, laboratories, self-paced instruction, and special projects were among the teaching methods used.

Faculty — Most faculty members were from the University of Dayton School of Engineering, with adjunct professors from other departments of the school, as well as consultants from local businesses.

Location — All courses were held at the University of Dayton.

College services — The University of Dayton advertised the program, recruited students, and provided extensive guidance and counseling for these adults returning to school.

Organization services — The Air Force paid tuition in full, provided some stipends for living costs, and gave additional counseling where necessary.

Contract charges — The contract was for $500,000 for three 12-month programs, or an approximate cost of $166,667 for each program.

Evaluation — Students evaluated instructors and the content of all courses.

Certification — The University of Dayton granted a second bachelor's degree in electrical engineering to students completing the program.

Contact

Assistant Dean for Special Programming
School of Education
Division of Continuing Education
University of Dayton
300 College Park
Dayton, Ohio 45469

MICROCOMPUTER INSTRUCTION FOR PUBLIC SCHOOL TEACHERS

Fort Hays State University, Fort Hays, Kansas
Elkhart School District, Elkhart, Kansas

Students	Approximately 20 elementary and secondary school teachers undertook this instruction.
Content	The course offered some programming, Basic, mathematics and methods for teaching through the use of microcomputers.
Schedule	Students attended 16-week semesters. Classes met one day a week from 6:30 p.m. to 9:30 p.m.
Methods	Lectures and computer-laboratory instruction were the primary teaching methods in this program.
Faculty	Faculty were from the Fort Hays State University Colleges of Arts and Sciences, and the College of Education.
Location	The course was taught at schools in the Elkhart Unified School District.
College services	Fort Hays State University provided advising, instruction, registration, and materials.
Organization services	The Elkhart School District advertised the course and provided classrooms as well as access to computer facilities.
Contract charges	Elkhart School District paid $37 per student credit hour for a total contract of approximately $2,400.
Evaluation	Students completed evaluation questionnaires for the course. In addition, faculty members audited and evaluated the course.
Certification	The course was offered for graduate credit.
Contract	Dean of Continuing Education Fort Hays State University Fort Hays, Kansas 67601

MULTI-CULTURAL MASTER'S DEGREE PROGRAM FOR ELEMENTARY SCHOOL TEACHERS

University of New Mexico, Albuquerque, New Mexico
Zuni Pueblo Tribal Council, Zuni Reservation, New Mexico
Ramah Navajo School Board, Inc., Navajo Reservation, New Mexico

Students

Approximately 20 elementary school teachers in Zuni public schools, mission schools, or religious schools were trained through this program. Approximately 90 percent of this group were Zuni Indians, all of whom had undergraduate degrees received from field-based programs.

Approximately 20 elementary school teachers from the Pine Hill Navajo School and surrounding schools serving Navajo children were trained through this program. Approximately 80 percent of this group were Navajo Indians, most of whom had undergraduate degrees.

Content

A variety of courses in education and Zuni/Navajo culture were offered, including Zuni/Navajo oral language, Zuni/Navajo literacy, American-Indian children's literature, bilingual curriculum development, introductory linguistics, and research methods. In addition to the courses, all students completed an independent research project.

Schedule

All students attended six 16-week semesters at a local site, plus an eight-week summer session on the University of New Mexico campus in Albuquerque. Semester classes met once a week from 4:30 p.m. to 8 p.m. Summer-session classes met for 1¼ hours, five days a week.

Methods

Major methods of instruction were "modeling" by the faculty members on how to perform various teaching tasks, as well as lectures and group discussions.

Faculty

Graduate faculty members of the University of New Mexico's College of Education taught most courses. However, Zuni (and some Navajo) language courses were taught by Zuni and Navajo Reservation members, who served as adjunct instructors of the university.

Location

The semester courses were taught at the Zuni and Navajo Reservations on the western border of New Mexico in its public or religious schools. The summer-session courses were held at the University of New Mexico campus at Albuquerque.

College services

The University of New Mexico allowed for student enrollment on the reservation, provided a field graduate librarian and a library, advised students on academic affairs, and provided summer-session housing in Albuquerque.

Organization services

The local Zuni and Navajo Advisory Boards made the final selection of students and provided facilities on the reservation for the classes and the field library.

Contract charges

The University of New Mexico received approximately $74,000 from a grant from the United States Department of Education's Bilingual Education Program (Title VII funds).

Evaluation

All courses were evaluated at their conclusion by each student using the University of New Mexico Instruction and Course Evaluation System (ICES). Zuni and Navajo Advisory Boards met and considered student evaluation in planning for future courses. Testing of Zuni children is also planned, since improvement of Zuni children's performance in school was the primary purpose of the training. To date, this testing has not been conducted.

Certification

All students who completed the program received a master's degree in education from the University of New Mexico, teacher certification, additional endorsements from the State of New Mexico, and sanction by the Zuni Tribal Council.

Contact

Director
Zuni/Navajo MA Program
College of Education
University of New Mexico
Albuquerque, New Mexico 87131

REGISTERED-NURSE PROGRAM FOR LICENSED VOCATIONAL NURSES

Modesto Junior College, Modesto, California
California Worksite Education Training Act (CWETA), in consortium with Emanuel Hospital, Oak Valley Hospital, Doctors Hospital, Modesto City Hospital, Scenic General Hospital, and Memorial Hospital

Students	Approximately 12 licensed, vocational nurses from six hospitals in the Modesto area participated in this program.
Content	The course included clinical training in psychiatric nursing, obstetrics, intensive care, and communication practices with patients.
Schedule	Students attended the equivalent of three academic semesters for one year. Classes met two days a week (usually Tuesdays and Thursdays), for a total of 15 hours a week.
Methods	Lectures and clinical rotations in hospital settings were the primary methods of instruction.
Faculty	Full-time adjunct nursing instructors were hired from hospitals in the community.
Location	Most of the clinical training was held in hospitals, with classes at Modesto Junior College.
College services	Modesto Junior College provided all administrative services, tutoring, and English-as-a-second-language for bilingual students. In addition, the CWETA staff was responsible for counseling, tutoring, monitoring the students' progress, and job development.
Organization services	The hospitals provided clinical training facilities and were also responsible for supervision. They also guaranteed jobs for students who completed the program.
Contract charges	This information was not available.
Evaluation	Students evaluated the courses and their clinical internships.
Certification	Modesto Junior College awarded those who graduated from the course an associate degree in arts or science. Students earned the title of registered nurse after passing state boards.
Contact	Associate Dean of Instruction for Vocational Education Modesto Junior College Modesto, California 95359

TEACHER-AIDE DEGREE PROGRAM

University of New Mexico, Albuquerque, New Mexico
The Navajo Tribe, Window Rock, New Mexico

Students	Approximately 110 Navajo teacher aides participated in this degree program. All had high school diplomas or GEDs, and many had completed the lower division at the Navajo Community College. The majority were women working in public schools, mission schools, contract schools, and head-start programs.
Content	A wide variety of undergraduate courses were offered, including educational methods, linguistics, the Navajo language, Navajo bilingual-student teaching, mathematics and science for elementary schools, and early child development.
Schedule	Courses were conducted during two 16-week semesters, and an eight-week summer session was held. During the 16-week semesters, classes were taught one day a week for nine hours.
Methods	Teaching involved a variety of techniques, including group process, videotaping, and experiential learning. Lectures were not used.
Faculty	Half the program was taught by faculty members from the University of New Mexico's College of Education, the other half was taught by adjunct faculty. Fifteen to 20 faculty and two field supervisors were involved in each semester.
Location	Courses were taught at public schools in Ship Rock, Crown Point, and Alamo, Arizona.
College services	The University of New Mexico sponsored a branch on the Navajo reservation where counseling, library facilities, and other services were provided.
Organization services	The Navajos provided classroom facilities, advertised courses, selected students, and set program goals.
Contract charges	The University of New Mexico received $200,000, primarily from Federal Indian Education funds.
Evaluation	The University of New Mexico is conducting a five-year follow-up study focusing on teacher performance, rate of teacher turnover, and retention rate of Navajo elementary school children.
Certification	Students who completed the program were awarded a bachelor's degree in elementary education by the University of New Mexico, as well as state certification. Demonstrated proficiency in the Navajo language was also recognized.
Contact	Program Director Mesa Vista Hall University of New Mexico R–2047 NPDP Albuquerque, New Mexico 87131

UPWARD-MOBILITY DEGREE PROGRAM FOR GOVERNMENT EMPLOYEES

American University, Washington, D.C.
National Institutes of Health, Bethesda, Maryland

Students — Approximately 50 employees of the National Institutes of Health (NIH), whose upward mobility was compromised by lack of a college education, participated in this degree program. All students were high school graduates, and a number of them had completed some college courses. A large number of women and minorities were involved in this affirmative-action program.

Content — Each student designed his or her own program based on the requirements of the job to which he or she would be promoted. Typical concentrations were in business, public administration, and the sciences. Most students enrolled in the program matriculated for a degree.

Schedule — Students were enrolled full time and took day or evening courses, whichever were appropriate for their work schedules and interests. All students accepted in the program were promoted to the next GS level and continued working half time while attending classes.

Methods — Teaching methods included lectures, texts, laboratories, and role playing.

Location — Students took courses on the American University campus.

College services — The American University's Division of Continuing Education and Summer Sessions provided an orientation program, on-campus registration, and advising.

Organization services — The National Institutes of Health provided a coordinator who supervised the progress of each student, allowed students to work only half time while studying, and paid for books and laboratory expenses.

Contract charges — The contract was approximately $145,000 a year for 50 students enrolled full time.

Evaluation — Students evaluated the courses and the program. The program was evaluated jointly by the National Institutes of Health and American University.

Certification — Most students received bachelor's degrees in general studies.

Contact — Acting Dean of Continuing Education and Summer Sessions
American University
McKinley 107
4400 Massachusetts Avenue, N.W.
Washington, D.C. 20016

II. CONTRACTS WITH GOVERNMENT AGENCIES AND VOLUNTARY ASSOCIATIONS

B. Certificate Programs and Noncredit Courses

CHEMICAL-DEPENDENCY COUNSELING FOR HUMAN-SERVICES WORKERS

Eastern Montana College, Billings, Montana
Coalition of Human Services Agencies compromising two hospitals, a mental-health center, the city and county health departments, a private foundation, and several private practitioners in Billings, Montana

Students — Approximately 65 graduate school students and human-services professionals were trained through this program, including social workers, nurses, counselors, and physicians, all of whom were directly involved in treating chemically dependent clients.

Content — Topics for the training included personality characteristics of the chemically dependent, current research on chemical dependency, the role of the family, counseling techniques, and referral techniques.

Schedule — Fifteen students attended eight days of training scheduled over six months. An additional 50 students attended 6½ days of training for a year. All training was conducted on students' own time, usually during weekends.

Methods — Group discussion, role playing, simulation, situation analysis, and problem solving were frequently used as methods of instruction.

Faculty — Approximately half the faculty were from Eastern Montana College's Institute of Rehabilitation Services, and the rest were community experts employed by the college or adjunct faculty members of the college.

Location — All classes were held on campus at Eastern Montana College, a central location neutral to all agency representatives.

College services — Eastern Montana College identified students and developed a resource booklet and all instructional materials.

Organization services — The Coalition of Human Services Agencies paid for student travel and some staff administration.

Contract charges — Eastern Montana College and the Coalition of Human Services Agencies received a grant of $8,500 from State Rehabilitation Services to cover training costs.

Evaluation — Students evaluated each session. Eastern Montana College also recognized the subsequent formation of a network of human-services workers in Billings as evidence of program success.

Certification — Although most students chose to participate for no credit, some students received CEUs and others applied their training hours toward satisfaction of state licensure requirements.

Contact — Dean
School of Extended Studies and Community Services
Eastern Montana College
200 McMullen Hall
Billings, Montana 59101

COMMUNITY WORK-EXPERIENCE PROGRAM FOR WELFARE FAMILIES

Bowling Green State University, Bowling Green, Ohio
Ohio Department of Welfare, Columbus, Ohio
Wood County Welfare Department, Bowling Green, Ohio

Students Approximately 500 people receiving Aid to Families with Dependent Children (AFDC) participated in this program. More than half the participants had been successfully employed but had lost their jobs as a result of the decline in the economy. Others were long-term welfare recipients. Educational backgrounds of the participants ranged from some high school to high school diplomas to some college courses. The average age was 30.

Content The purpose of this welfare/work program was to allow people receiving public assistance to return a service in exchange for financial assistance by working in public agencies or nonprofit organizations. The program consisted of 120 hours of training in work readiness. Topics included assessment of interests and skills, resumé preparation, interviewing, and job maintenance.

Schedule Classes met four days a week for four weeks, from 9:30 a.m. to 4:30 p.m.

Methods A variety of instructional methods were used, including speakers, self-assessment instruments, group activities, and role playing.

Faculty The program was anchored by four coordinators. An additional 20 adjunct faculty were hired from throughout the state to teach specialized topics.

College services Bowling Green State University provided classrooms, library facilities, office space, and administrative services.

Organization services The county and state welfare departments determined the eligibility of participants, administered the grant, and made referrals for interviews.

Contract charges Bowling Green University was paid approximately $300,000 for training 500 students.

Evaluation The goal of the program was to place 75 percent of the eligible participants into community-work jobs. The goal was met. In addition, the remaining 25 percent found unsubsidized employment.

Certification All students were awarded a certificate of completion.

Contact Director of the Community Work-Experience Program
Management Support Services
Bowling Green State University
Bowling Green, Ohio 43403

COMPUTER-TRAINING CAMP FOR CHILDREN

Sinclair Community College, Dayton, Ohio
YMCA Camp Kern, Wilmington, Ohio

Students	Approximately 24 youngsters from elementary and middle schools, ranging in age from 10 to 15, attended this computer course.
Content	The course was an introduction to computing and included instruction in basic computer skills.
Schedule	The one-week course met Monday through Friday and provided approximately 20 hours of computer instruction.
Methods	Teaching included lectures, hand-out materials, and hands-on computer instructions.
Faculty	The instruction was taught by a faculty member from Sinclair Community College.
Location	The course was held at the YMCA Camp Kern in Wilmington, Ohio.
College services	Sinclair Community College provided computers and instructional materials.
Organization services	The YMCA provided their camp facilities.
Contract charges	The total contract was $2,500 for a class of up to 24 students.
Evaluation	Students evaluated the course.
Certification	No certificate was awarded.
Contact	Dean of Continuing Education Sinclair Community College 444 West Third Street Dayton, Ohio 45402

CONTINUING EDUCATION FOR HEALTH PROFESSIONALS

Drake University, College for Continuing Education, Des Moines, Iowa
Iowa Department of Social Services, Des Moines, Iowa

Students — Approximately 110 health professionals participated in this program, including pharmacists, registered nurses, respiratory therapists, dieticians, physicians' assistants, licensed practical nurses, medical technicians, and X-ray technicians. All students had at least an associate degree, and many had a bachelor's or master's degree.

Content — A variety of health-care courses were offered, including drug monitoring for peptic-ulcer therapy, congestive heart failure, and bronchial asthma.

Schedule — Courses were held for two hours each Monday afternoon for three weeks, for a total of six hours of instruction.

Methods — Courses were conducted via a statewide, interactive closed-circuit audio system.

Faculty — Courses were taught by two faculty members of Drake University's College of Pharmacy, one a clinical pharmacist and the other a specialist in drug monitoring.

Location — Instruction was transmitted via Telenet throughout the state to 10 different state institutions, including a state prison, a veterans' home, and several mental-health facilities.

College services — Drake University developed and distributed instructional workbooks prior to conducting the courses.

Organization services — The Iowa Department of Social Services duplicated the instructional workbook, obtained access to the Telenet system, provided instructional facilities and an on-site group facilitator, and gave students time off from work to participate in the training.

Contract charges — Drake University was paid $1,700 for conducting the training.

Evaluation — Students completed evaluations at the conclusion of the training.

Certification — Students were awarded 4.5 CEUs for completing the program and were able to apply their training hours toward satisfaction of Iowa relicensure requirements.

Contact — Director
Center for Professional and Executive Development
College for Continuing Education
Drake University
25th Street and University Avenue
Des Moines, Iowa 50311

DIGITAL-CIRCUITRY PROGRAM FOR TECHNICIANS

University of New Hampshire, Durham, New Hampshire
United States Naval Shipyards, Portsmouth, New Hampshire

Students Twenty-five entry-level electronics apprentices from the United States Naval Shipyards participated in this program. All students were high school graduates, and about half of them had received additional training in electronics while serving in the military.

Content A variety of technical courses were developed relating to digital circuitry and data processing.

Schedule A two-week training session involving 80 hours of class attendance. Courses met Monday through Friday, from 8 a.m. to 4 p.m.

Methods Lectures, laboratories, and instructional materials were used as methods of instruction.

Faculty All courses were taught by full-time faculty members from the Department of Electrical Engineering at the University of New Hampshire.

Location All training was held at the University of New Hampshire in Durham.

College services The University of New Hampshire provided laboratory equipment, materials, and supplies.

Organization services The Naval Shipyards advertised the program, selected the participants, and provided time off from work.

Contract charges The contract was approximately $10,000.

Evaluation Student grades and job progress were used as gauges of success.

Certification Students were awareded CEUs.

Contact Assistant Director for Continuing Education
University of New Hampshire
Durham, New Hampshire 03824

GENERAL EDUCATION AND JOB PREPARATION FOR JOB-CORPS PARTICIPANTS

Morehead State University, Morehead, Kentucky
Job Corps, United States Department of Agriculture, Forest Service, Washington, D.C.

Students Approximately 170 unemployed young adults, aged 18 to 24, participated in the program. Most had not received a high school diploma, and their reading levels ranged from the first to the eighth grade.

Content A variety of general education and job-preparation courses were offered, including preparation for the GED, health education, driver education, intergroup relations, information about the world of work, and job training.

Schedule Instruction was provided five days a week, from 8 a.m. to 3 p.m., for a maximum of two years. Individual students participated according to need, from a minimum of three months to a maximum of two years.

Methods Although instructional methods varied by course, individualized, self-paced and/or programmed learning were frequently used.

Faculty Morehead State University employed seven full-time instructors to provide the basic skills. These instructors were not regular faculty members, and they were not given academic appointments at the university.

Location Most of the courses were held at a Job Corps training center, approximately 35 miles from the Morehead State University campus.

College services Morehead State University offered its campus recreational and library facilities to the students, provided GED testing, and a concert and lecture series.

Organization services Job Corps promoted the training program, recruited and selected students for it, provided all instructional materials and equipment as well as the training facilities, and paid travel expenses and wages for the students engaged in the training.

Contract charges The Department of Agriculture, Forest Service, paid Morehead State University approximately $150,000 per year for the basic-skills education program.

Evaluation Morehead State University staff monitored the educational program and administered the Job Corps pre- and post-training evaluations for each course. The university also collected other measures of program success, such as the number of students who obtained GEDs. (Achievements in the first six months included 38 Job Corps GED awards and 30 state GED awards.)

Certification No credit was given for the training.

Contact Director of Continuing Education
Bureau of University and Regional Services
Morehead State University
901 Ginger Hall
Morehead, Kentucky 40351

GRIEVANCE PROCEDURES FOR UNION OFFICERS AND SHOP STEWARDS

University of Arkansas, Industrial Research and Extension Center, Little Rock, Arkansas
Eight local unions of the United Brotherhood of Carpenters and Joiners, El Dorado, Arkansas

Students — Approximately 25 officers and shop stewards of local unions attended this course.

Content — The fundamentals of grievance procedures, including researching and presenting grievances, were included in the training.

Schedule — Training was scheduled for four hours for two consecutive evenings, for a total of eight hours.

Methods — Lectures and discussions were used as methods of instruction.

Faculty — Regular extension faculty members of the University of Arkansas provided the training.

Location — A local union hall was used for the training.

College services — The University of Arkansas provided transportation for faculty members and on-site registration for students.

Organization services — The local unions promoted the training within their membership, selected the participants, and assisted in planning the content of the training sessions.

Contract charges — The University of Arkansas received a total of approximately $450—approximately $15 per student. This training fee was indirectly supplemented by the State of Arkansas' appropriation to the university for labor-education studies.

Evaluation — Students completed individual evaluations of the training sessions. The University of Arkansas also judged the program by the rate of continued involvement of local unions in labor education.

Certification — Each student received .8 CEUs for the training.

Contact —
Assistant Director
Labor Education Program
Business Administration Building, Room 224
University of Arkansas at Little Rock
33rd and University
Little Rock, Arkansas 72204

INTERNATIONAL AND DOMESTIC AFFAIRS FOR MEMBERS OF CONGRESS

Harvard University, Kennedy School of Government, Cambridge, Massachusetts
House Administration Committee, United States Congress, Washington, D.C.

Students Approximately 40 newly elected members of Congress, ranging widely in educational, occupational, and political backgrounds, participated in this program on a first-come, first-served basis.

Content International topics included U.S.–U.S.S.R. relations, Middle East policy, and U.S.–China policy. Domestic topics included the defense budget, unemployment, inflation, tax policy, Social Security financing, regulation making, and energy policy.

Schedule The program ran six consecutive days, from 8 a.m. to 10 p.m.

Methods The training used case studies, which were presented in a variety of ways, including lectures, films, and videotapes.

Faculty Approximately two thirds of the program was taught by Harvard or M.I.T. faculty. The remainder of the program was taught by adjunct faculty members from the Brookings Institute, the Congressional Research Service, and independent consulting firms.

Location The program was held at the Kennedy School of Government, Harvard University.

College services The Kennedy School of Government provided housing, meals, and all instructional materials for the participants.

Organization services The House Administration Committee provided transportation for the members of Congress, promotion of the program within Congress, and assistance in planning the content of the program.

Contract charges Harvard University received approximately $60,000, of which $25,000 was raised by the university from private sources, one of which was the Sears Foundation.

Evaluation Students completed questionnaires after each program session. Informal feedback was also given to the faculty members from the staff of the offices of the majority and minority leaders.

Certification No certification was given.

Contact Fellows' Program Coordinator and Training Program Coordinator
Kennedy School of Government
Harvard University
79 John F. Kennedy Street
Cambridge, Massachusetts 02138

MANAGEMENT TRAINING FOR CITY AND COUNTY EMPLOYEES

University of Kentucky, Center for Public Administration, Lexington, Kentucky
Lexington/Fayette Urban County Government, Lexington, Kentucky

Students	Approximately 125 middle- and upper-level managers representing various departments of city and county government attended this management training. Students' educational backgrounds ranged from high school diplomas to master's degrees.
Content	Training included stress management, employee evaluation, decision making, effective management techniques, and communication.
Schedule	Sessions were held on Wednesdays and Fridays, from 8 a.m. to 4:30 p.m., for four consecutive weeks: there was a total of eight training days. This schedule was repeated five times, and approximately 25 employees attended each program.
Methods	Group process and small discussion groups were used as methods of instruction. Lectures were not given.
Faculty	The University of Kentucky used faculty from the departments of political science and communications. In addition, two instructors from other universities taught as adjunct faculty members.
Location	Sessions met in the Lexington Fire Department training center.
College services	The University of Kentucky provided all instructional materials and held an orientation program.
Organization services	The Lexington/Fayette Urban County Government selected participants, gave them time off from work, and provided facilities.
Contract charges	The contract was approximately $24,000.
Evaluation	Classes were evaluated informally during training sessions. Students completed a written evaluation after each eight-day program.
Certification	Certificates of attendance were presented to each participant, and all students received 4.8 CEUs for completing the training.
Contact	Division of Government Training University of Kentucky Lexington, Kentucky 40506

MANAGEMENT TRAINING FOR MUNICIPAL CLERKS AND SECRETARIES

North Texas State University, Denton, Texas
Association of City Clerks and Secretaries of Texas, Texas Municipal League, Austin, Texas

Students — Approximately 362 municipal clerks and secretaries as well as other municipal officials throughout Texas have participated in this management training. Ninety-eight percent were high school graduates, 20 percent were college graduates, and approximately 50 percent had some college training.

Content — Courses included such topics as public administration, management, municipal finances and budgeting, public law, intergovernmental relations, personnel administration, and Texas municipal-election law. The program involved approximately 200 hours of home study, including examinations and seminar attendance.

Schedule — Seminars, which consisted of four days, or 28 hours of training per course, were offered six times during the year.

Methods — A variety of teaching techniques were used, including group process, case studies, panel discussions, and lectures.

Faculty — Ninety percent of the teachers were faculty members from North Texas State University.

Location — Each course was offered at North Texas State University and at other locations throughout the state.

College services — North Texas State University provided facilities, registration, books and materials, academic counseling, and transcripts. The university has provided these services for 14 years to the Texas Municipal League.

Organization services — The Association of City Clerks and Secretaries allowed time off from work for participants, as well as assistance in planning the curriculum.

Contract charges — The estimated total contract for the program was $65,000.

Evaluation — Students completed evaluations at the conclusion of each seminar. In addition, the university collected data on promotions and salary increases following training.

Certification — The university awarded CEUs at the completion of the course.

Contact — Assistant Dean
School of Community Service
North Texas State University
P.O. Box 5344
N.T. Texas Station
Denton, Texas 76203

RELIGIOUS EDUCATION FOR COLLEGE STUDENTS AND CHURCH LEADERS

St. Mary's University, San Antonio, Texas
Catholic Diocese of Corpus Christi, Corpus Christi, Texas

Students Approximately 700 members of the Catholic Diocese of Corpus Christi were trained in two groups: (1) college students seeking undergraduate theology credit; and (2) adults serving in leadership roles in the church, i.e., parochial school teachers, lectors, Eucharistic ministers, etc.

Content A variety of religious-education courses and seminars were offered, including Bible reading, spirituality, and Old Testament doctrine.

Schedule Courses were typically scheduled for two hours, one evening a week, for five consecutive weeks. Seminars were usually scheduled for five hours between 1 p.m. and 6 p.m.

Methods Lectures and small group discussions were used.

Faculty St. Mary's University graduate theology alumni living in the Diocese of Corpus Christi provided most of the instruction. The alumni were supplemented by theologians on the regular graduate faculty at the university.

Location All courses and seminars were held either in parish church halls or in Catholic schools centrally located within the Diocese of Corpus Christi.

College services St. Mary's University promoted the program within the diocese, provided on-site registration for students, kept student records, printed instructional materials, and provided travel for course and seminar administrators and faculty members.

Organization services The Diocese of Corpus Christi provided facilities for all courses and seminars, printed promotional materials, provided parish coordinators for courses and seminars, and provided some lodging and per diem expenses for St. Mary's University staff and faculty members.

Contract charges The Diocese of Corpus Christi guaranteed the payment of all expenses to St. Mary's University: $10 per student for a workshop, $15 per student for a CEU course, and $90 per credit hour, per student, for a course for academic credit.

Evaluation Students completed an evaluation for each course and seminar. Feedback to St. Mary's University staff was also provided by the Corpus Christi Lay Ministry Advisory Committee, which also served as the advisory committee for the contract.

Certification Except for four one-credit courses taken by 12 students, CEUs were offered for all courses and seminars.

Contact Director of Continuing Education
St. Mary's University
One Camino Santa Maria
San Antonio, Texas 78284

SUPERVISORY AND MANAGEMENT TRAINING FOR CITY EMPLOYEES

University of Georgia, Athens, Georgia
City of Atlanta, Atlanta, Georgia

Students	Approximately 350 first-line supervisors and entry-level managers from several city-government departments, including police, fire, environmental affairs, and recreation were trained. Most of the 350 were required by the City of Atlanta to attend the training sessions.
Content	Training sessions focused on the fundamentals of supervision and management, including motivation, discipline, performance appraisal, time management, goal setting, communication, coaching, and counseling.
Schedule	A total of 36 hours of training was conducted over two or three weeks in three, six-hour days. Students were given time off from work to attend the sessions.
Methods	A variety of experiential learning methods were used, such as simulation and gaming. Lectures were purposely avoided.
Faculty	Faculty members from the University of Georgia's Institute of Government conducted the training.
Location	Sessions were held in Atlanta in either public (city) buildings or private, corporate training facilities.
College services	The University of Georgia provided registration at the work site for the students, and printed all instructional materials.
Organization services	The City of Atlanta promoted the training sessions, recruited all students, allowed students time off from work to attend the training sessions, and scheduled the use of the various training facilities.
Contract charges	Although information on charges for this training was not available, the University of Georgia typically charges $10 per day per student.
Evaluation	The University of Georgia staff conducted daily evaluations of the faculty members, the content of the training, and training facilities. At the end of each program, the staff completed an overall evaluation of the program. Finally, the staff held monthly feedback sessions with city officials to review the training programs.
Certification	The University of Georgia awarded certificates of completion for program attendance.
Contact	Institute of Government University of Georgia Athens, Georgia 30602

SUPERVISORY AND MANAGEMENT TRAINING FOR U.S. DEPARTMENT OF THE ARMY CIVILIAN MANAGERS

State University of New York, Albany, New York
United States Department of the Army, Watervliet Arsenal, Watervliet, New York

Students — Approximately 75 civilian supervisors, foremen, and sub-unit chiefs participated in this program. All were high school graduates, and several had taken some college courses.

Content — The program comprised 10 courses. Core courses included motivation and leadership, communications skills, interviewing and counseling, conflict, stress and time management, personnel management for supervisors, affirmative action, decision making, and problem solving. Electives included administration of union contracts, goal setting and tactical planning, finance for supervisors, management and society, and data processing and management-information systems.

Schedule — Students were offered two courses a week (nine per year) on Tuesdays and Thursdays from 4:30 p.m. to 6:30 p.m. Courses were generally of a five- to seven-week duration.

Methods — A variety of experiential learning methods were used, including small group exercises, role playing, and diagnostic instruments.

Faculty — 80 percent of the teachers were faculty members from the School of Business or the Division of Continuing Studies at the State University of New York, Albany.

Location — All classes were held at the Watervliet Arsenal.

College services — The State University of New York at Albany provided all administrative services, academic counseling, and a program manager. If students missed classes at the Arsenal, they were able to attend the same classes at the Albany campus. Participants completing the full program receive a certificate, and CEU records are maintained by the university.

Organization services — Watervliet Arsenal selected students.

Contract charges — The contract was for $2,500 per course, or a total of $22,500 annually for nine courses. The total three-year contract was $67,500.

Evaluation — Students completed an evaluation questionnaire for each course.

Certification — The university awarded certificates of completion and CEUs.

Contact — Director of Community Education
Division of Continuing Studies
State University of New York at Albany
Husted 208
35 Western Avenue
Albany, New York 12222

III. INDEX

A. Colleges
B. Organizations

A. Colleges

Albany Junior College, Georgia 36
American University, Washington, D.C. 13, 59
Azusa Pacific University, California 50
Bowling Green State University, Ohio 64
Bunker Hill Community College, Boston, Massachusetts 17
Carnegie-Mellon University, Graduate School of Industrial Administration
Pittsburgh, Pennsylvania 27
College of San Mateo, California 51
Creighton University, Omaha, Nebraska 48
Drake University, College for Continuing Education, Des Moines, Iowa 66
Eastern Illinois University, Charleston, Illinois 32, 39
Eastern Montana College, Billings, Montana 63
Empire State College, Saratoga Springs, New York 8
Fairfield University, Connecticut 33
Fort Hays State University, Kansas 54
Harvard University, Kennedy School of Government,
Cambridge, Massachusetts 70
Indiana Vocational Technical College, Indianapolis. 34
Johnson State College, Burlington, Vermont 5
Kent State University, Trumbull Campus, Warren, Ohio 44
Marymount Manhattan College, New York, New York 20
Modesto Junior College, California. 35, 57
Morehead State University, Kentucky 68
New York City Technical College, New York, New York 30
North Texas State University, Denton. 40, 72
Pace University, Briarcliff Manor, New York. 18
Pace University, New York, New York 10
Piedmont Technical College, Greenwood, South Carolina. 38
Rio Salado Community College, Phoenix, Arizona 3, 49, 52
Roxbury Community College, Boston, Massachusetts 31
Russell Sage College, Albany, New York 47
Seattle Central Community College, Washington 37
Sinclair Community College, Dayton, Ohio 65
Southeast Community College, Cumberland, Kentucky 43
St. Ambrose College, Davenport, Iowa 11
St. Mary's University, San Antonio, Texas. 73

State University of New York, Albany 75
Triton College, River Grove, Illinois 4
University College of Widener University, Wilmington, Delaware 28
University of Arkansas, Industrial Research and Extension Center, Little Rock . 69
University of Dayton, Ohio 41, 53
University of Georgia, Athens 74
University of Kentucky, Center for Public Administration, Lexington 71
University of New Hampshire, Durham 67
University of New Mexico, Albuquerque 55, 58
University of Pennsylvania, Philadelphia 22
University of Portland, Oregon 9
University of Toledo, Ohio 42
University System of New Hampshire, School for Lifelong Learning, Durham. . 6
Washington University, St. Louis, Missouri 16
Washtenaw Community College, Ann Arbor, Michigan 14
Worcester State College, Massachusetts 7, 12

B. Organizations

Allis Chalmers Corporation, Milwaukee, Wisconsin 35
American Fletcher National Bank, Indianapolis, Indiana 34
American Telephone and Telegraph Company (AT&T), New York, New York . . . 10
Arizona Department of Economic Security, Phoenix, Arizona 49, 52
Association of City Clerks and Secretaries of Texas, Texas Municipal League, Austin, Texas 72
Bank Personnel Managers Association, Toledo, Ohio 42
CIGNA Corporation, Philadelphia, Pennsylvania 22
California Work-site Education Training Act (CWETA), in consortium with Emanuel Hospital, Oak Valley Hospital, Doctors Hospital, Modesto City Hospital, Scenic General Hospital, and Memorial Hospital, situated in the Modesto area 57
California Work-site Education and Training Act (CWETA), in consortium with Hewlett-Packard Co., Litton Industries Inc., Apple Computer Inc., Ampex Corporation, Siltec Corporation, Watkins-Johnson, and others in the San Mateo area. 51
Catholic Diocese of Corpus Christi, Corpus Christi, Texas. 73
Champion International Corporation, Stamford, Connecticut 33
City of Atlanta, Georgia. 74
Coalition of Human-Service Agencies, Billings, Montana 63
Colonial Penn Group, Philadelphia, Pennsylvania 28
Corning Glass, Greenville, Ohio 41
Data General Corporation, Portsmouth, New Hampshire 6
Data Printer Corp., Malden, Massachusetts 17
Digital Corporation, Burlington, Vermont. 5
Eastover Mining Company, Brookside, Kentucky 43
Elkhart School District, Elkhart, Kansas. 54
Foss Launch and Tug Company, Seattle, Washington 37
General Dynamics Corporation, Forth Worth, Texas 40
General Electric Corporation, Mattona, Illinois 39
General Motors Corporation, Parma, Ohio 44
General Motors Corporation, Warren, Michigan 4, 29
General Motors Corporation, Hydramatic Division, Ypsilanti, Michigan 14
General Motors Dealerships, Greater Chicago area, Illinois 4
Goodyear Corporation, Akron, Ohio 27
Hazleton Laboratories, Vienna, Virginia 13

House Administration Committee, United States Congress, Washington, D.C. . 70
IBM Corporation, Armonk, New York 18
IBM Corporation, Brooklyn, New York 8
Institute for Management Development, St. Ambrose College, Davenport, Iowa . 11
Iowa Department of Social Services, Des Moines, Iowa 66
Job Corps, United States Department of Agriculture, Forest Service,
Washington, D.C. 68
Lexington/Fayette Urban County Government, Lexington, Kentucky 71
Litton Industries, Rockville, Maryland 13
Miller Brewing Company, Albany, Georgia 36
Monsanto Company, St. Louis, Missouri 16
Monsanto Textiles Company, Greenwood, South Carolina 38
Motorola Incorporated, Phoenix, Arizona 3
National Institutes of Health, Bethesda, Maryland 59
New England Deaconess Hospital, Boston, Massachusetts 31
New York State Department of Correctional Services, Albany, New York 47
New York State Division of Alcoholism and Alcohol Abuse, Albany, New York . 47
New York Telephone Company, New York, New York 30
Norton Company, Worcester, Massachusetts 7, 12
Ohio Department of Welfare, Columbus, Ohio. 64
Pfizer Inc., New York, New York 20
Ramah Navajo School Board, Inc., Navajo Reservation, New Mexico 55
State Mutual Life Insurance Company of America, Worcester, Massachusetts . . 12
Tektronix Inc., Beaverton, Oregon 9
The Mission Society of New York City 47
The Navajo Tribe, Window Rock, New Mexico. 58
The Salvation Army School for Officer Training, Palos Verdes, California 50
Trailmobile Company, Charleston, Illinois 32
United Brotherhood of Carpenters and Joiners, El Dorado, Arkansas 69
United States Air Force, Logistics Command, Dayton, Ohio. 53
United States Army Academy of Health Sciences, Fort Sam Houston,
San Antonio, Texas. 48
United States Department of the Army, Watervliet Arsenal, New York 75
United States Naval Shipyards, Portsmouth, New Hampshire. 67
Wood County Welfare Department, Bowling Green, Ohio. 64
YMCA, Camp Kern, Wilmington, Ohio 65
Zuni Pueblo Tribal Council, Zuni Reservation, New Mexico. 55

Books of Interest From the College Board

Adult Access to Education and New Careers: A Handbook for Action. Carol B. Aslanian, Project Director, and Harvey B. Schmelter, Editor. Shows postsecondary institutions how to design, operate, and evaluate an adult career counseling center. (001257) 1980, 141 pages, $9.75.

Adult Learning, Higher Education, and the Economics of Unused Capacity. Howard Bowen. Explores some major policy options for higher education during the next two decades and observes that accommodating increasing numbers of adults will become a very attractive choice. (237414) 1980, 33 pages, $4.

Americans in Transition: Life Changes as Reasons for Adult Learning. Carol B. Aslanian and Henry M. Brickell. Reports the results of a national study of 2,000 Americans 25 years or older that was conducted in order to explain the causes and timing of adult learning. Useful to educational providers, planners, and counselors. (001273) 1980, 172 pages, $6.50.

Learning Times, Second Issue, Fall 1982. A lively, informative newspaper designed to start adults thinking about the diverse educational opportunities and resources available to them. (248101) 1982, 12 pages, $12 per package of 50 copies. No other discounts apply.

Senior Learning Times, Fall 1981. An informative publication geared to older adults who are interested in learning about various educational opportunities and resources. (248102) 1981, 12 pages, $15 per package of 50 copies. No other discounts apply.

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